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NATIONAL ENERGY SECURITY ACT OF 1991

(Sections 6003 and 6004 of Title VI and Title X)

HEARING BEFORE THE COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE ONE HUNDRED SECOND CONGRESS

FIRST SESSION

ON

S. 341

TO REDUCE THE NATION'S DEPENDENCE ON IMPORTED OIL, TO PROVIDE FOR THE ENERGY SECURITY OF THE NATION AND FOR OTHER PURPOSES

MARCH 7, 1991

PART 6



Printed for the use of the
Committee on Energy and Natural Resources

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NATIONAL ENERGY SECURITY ACT OF 1991

(Sections 6003 and 6004 of Title VI and Title X)

THURSDAY, MARCH 7, 1991

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The committee met, pursuant to notice, at 9:36 a.m. in room SD-366, Dirksen Senate Office Building, Hon. J. Bennett Johnston, chairman, presiding.

OPENING STATEMENT OF HON. J. BENNETT JOHNSTON, U.S. SENATOR FROM LOUISIANA

The CHAIRMAN. The committee will come to order. This is a hearing on the Natural Gas Provisions of the National Energy Security Act of 1991, S. 341.

The committee will receive testimony on title X, The Natural Gas Regulatory Provisions of the bill, as well as the sections regarding the demonstration and commercialization of new natural gas technologies.

The committee will also receive testimony on the natural gas provisions in title II of the President's National Energy Strategy Act.

Because the NES bill was received by the Congress only 2 days ago, the hearing record will remain open for an additional week to receive supplementary testimony on the natural gas provisions of the President's NES. The staff will provide details regarding the requirements for filing such testimony.

Natural gas is one of the bright spots on the energy horizon. The enormity of the natural gas resource base is impressive. According to the Department of Energy, even after the exclusion of Federal lands that are off limits to expiration and production, the lower 48 natural gas resource base is economically recoverable, using conventional technology, represents 38 years of supply at the current rate of consumption.

When the additions attributable to advanced exploration and production technology are included, the economically recoverable lower 48 resource base grows to 57 years of supply at current consumption rates. Even if natural gas demand grows significantly, the bottom line is that our Nation is blessed with abundant natural gas resources that we can count on far into the future.

Natural gas should be one of the cornerstones of our national energy policy. It can make a big contribution in displacing import-

ed oil. Natural gas can fuel much of the electric generating capacity that the Nation will need in the near future. It can help us achieve compliance with the Clean Air Act Amendments.

The challenge is how to get natural gas to the market more efficiently and how to develop the markets where natural gas can make a contribution.

Title X of S. 341 addresses this challenge in the following ways. First, it would expedite pipeline construction by providing a range of regulatory options. The level of regulatory oversight would vary according to the financial risk assumed by the pipeline and the effect that the new pipeline might have on existing ratepayers.

Title X would streamline the regulatory process at FERC. This would be done by making the FERC the lead agency for the NEPA process and permitting third-party contractors to prepare environmental impact assessments. Title X also addresses the delays caused by tolling orders on rehearing.

Third, title X would remove regulatory obstacles to greater use of natural gas as an automotive fuel. This would be done by clarifying and limiting the FERC's jurisdiction over local distribution companies selling vehicular natural gas.

Title II of the NES bill goes much in the same direction. The NES bill, however, goes much further in permitting parties to construct and operate pipelines facilities with minimal and in some cases, virtually nonexistent regulatory oversight. You might say that S. 341 stops at the Euphrates River on regulation, while the NES goes all the way to Baghdad.

At present, I am reluctant to go as far as the NES bill suggests. My concern is that we not create a new problem in the process of solving old problems. Our experience with the NGPA is instructive in this respect. We solved the problem of natural gas shortages on the interstate market, but we created the problem of take or pay.

It would be unfortunate if in solving the need for additional pipeline capacity we created the conditions for the take or pay problem of the 1990's in terms of overbuilt, underutilized pipeline capacity.

We need to find a way to eliminate unnecessary and costly regulatory delay in the construction of new pipelines, while at the same time protecting the public from anti-competitive or unduly discriminatory conduct.

Title II of the NES bill includes a proposal to reorganize the FERC. The FERC would no longer be an independent regulatory agency under the NES proposal. It would be replaced by a new Natural Gas and Electric Administration within the Department of Energy. The new administration would be headed by a single administrator instead of a five-member commission.

We ought to explore whether changes are needed in the way the Federal Government makes and administers natural gas and electric policy. But we ought to not rush into irrevocable changes without fully comprehending their consequences.

Today's hearing is about the law governing the natural gas industry, not the agency that administers that law. The issue of FERC, whether it is the best agency to administer Federal natural gas and electric policy, and what changes may be needed, is best left for another day and another legislative vehicle, if at all.

In conclusion, we have a unique opportunity to make some significant improvements in the substantive law that governs the natural gas industry. We may be able to accomplish these things in short order.

I will look forward to working with the Department of Energy, the FERC, the natural gas industry, and the interested public in accomplishing this goal.

My colleagues have statements.

[Prepared statement of Senators Conrad and Shelby and the texts of sections 6003 and 6004 of title VI and title X follow:]

PREPARED STATEMENT OF HON. KENT CONRAD, U.S. SENATOR FROM NORTH DAKOTA

Mr. Chairman, I wanted to thank you and Senator Wallop for holding this hearing on issues related to natural gas.

Natural gas must play a larger role in meeting this nation's energy needs. What is clear is that the current regulatory logjam has inhibited the development of natural gas, and that has had a profoundly negative effect on this nation's energy mix. Today, we use less natural gas than we did in 1970. The imperative to promote natural gas production is strong—it is an abundant domestic resource that is environmentally clean.

In my own state of North Dakota, there are ten natural gas processing plants and last year, 60.6 billion cubic feet of natural gas was processed. Natural gas is a tremendous resource that we must develop.

The Persian Gulf crisis has once again turned our attention to this country's excessive dependence on insecure sources of foreign crude. We must use this reawakened awareness of the dangers of dependence to jump start development of the resources we have at home—natural gas, coal, alcohol fuels and other renewable sources of energy.

Mr. Chairman, I look forward to the hearing today. I believe that the proposals contained in the National Energy Security Act are very promising.

PREPARED STATEMENT OF HON. RICHARD C. SHELBY, U.S. SENATOR FROM ALABAMA

Mr. Chairman, I am pleased to have the opportunity to participate in this hearing this morning on title X of S. 341.

This committee has a full agenda and a rather ambitious schedule for this session of Congress. I believe that we all agree that perhaps the greatest task confronting us is the formulation and passage of bipartisan legislation for an energy policy that will aid in securing our nation's future.

We are fortunate to have had two proposals laid before the committee.

I welcome the administration's proposal as a useful contribution to the creation of a comprehensive, national energy policy. Also, the distinguished chairman and ranking member, have introduced S. 341, the National Energy Security Act.

I was pleased to see that there are areas of the administration's proposal and S. 341 that complement each other. However, I believe that the Johnston/Wallop bill is far more reaching in its emphasis on conservation and renewable energy sources, which must be a key component of any energy policy in the national interest.

I also am glad to see that both proposals have taken into consideration the important role of the natural gas industry in shaping the future energy policy for our nation.

The enactment of the Natural Gas Act of 1938 began governments involvement in the natural gas markets, starting with a utility type regulation of interstate pipelines. That regulatory system has not always been as conducive to productivity as might be desired.

Recent events in the Persian Gulf have made it abundantly clear that we must utilize all of the energy resources at our disposal to the fullest extent possible. Natural gas and the pipeline industry will play a vital role in carrying out this mandate. Consequently, we have come to a time when we must recognize the need to remove the regulatory barriers to the construction of natural gas pipelines.

The intent of the NES and S. 341 to simplify the FERC certification process and expedite the construction of natural gas pipelines is clear. However, the NES proposes a more radical and extensive restructuring of the natural gas industry that could negatively impact pipeline interests, which are still feeling the effects of "take

or pay" provisions of gas supply contracts forcing them to buy more gas than they could resell. Considering this fact, we must proceed carefully in this matter and I believe that S. 341 is wisely cautious in its approach.

Also, I have had the opportunity to look over the amendments by my colleague from New Mexico and I believe that they will strengthen our efforts to expedite the FERC certification process.

Mr. Chairman, I welcome all of our witnesses today and look forward to their testimonies. I am particularly pleased to have my constituent, Ronald L. Kuehn, Jr. of Birmingham, Alabama, with us today. Ron is chairman, president and CEO of Sonat Inc., which is a large and very important energy company headquartered in my state. I have known Ron for some time and he has certainly done an enviable job in running Sonat. I believe that you will find his remarks interesting and informative. I look forward to hearing his testimony.

102D CONGRESS
1ST SESSION

S. 341

To reduce the Nation's dependence on imported oil, to provide for the energy security of the Nation and for other purposes.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 5 (legislative day, JANUARY 3), 1991

Mr. JOHNSTON (for himself and Mr. WALLOP) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To reduce the Nation's dependence on imported oil, to provide for the energy security of the Nation and for other purposes.

- 1 *Be it enacted by the Senate and House of Representa-*
- 2 *tives of the United States of America in Congress assembled,*
- 3 That this Act may be referred to as the "National Energy
- 4 Security Act of 1991".

* * * * *

TITLE VI—RESEARCH, DEVELOPMENT, DEMON-
STRATION AND COMMERCIALIZATION AC-
TIVITIES

7 SEC. 6003. NATURAL GAS END-USE TECHNOL-
8 OGIES.—(a) Program.—The Secretary of Energy shall carry
9 out a program to promote the development and commercial-
10 ization of new and advanced natural gas utilization technol-
11 ogies including, but not limited to, the following areas:

12 (1) Stationary source emissions control and effi-
13 ciency improvements including combustion systems, in-
14 dustrial processes, natural gas heating and cooling, and
15 cofiring natural gas with coal and waste fuels;

16 (2) natural gas storage including increased deliver-
17 ability from existing gas storage facilities and new ca-
18 pabilities for storage near demand centers and on-site
19 storage at major energy consuming facilities;

20 (3) transportation fuel alternatives and emissions
21 controls including natural gas vehicle commercializa-
22 tion and infrastructure development, and advanced en-
23 gines and propulsion concepts; and

24 (4) electrochemical energy conversion including
25 the commercialization of molten carbonate fuel cells

1 and the development of advanced natural gas-fired fuel
2 cell technologies.

3 (b) COOPERATIVE AGREEMENTS.—The Secretary shall
4 enter into cooperative agreements under this section.

5 (c) COST-SHARE.—The Secretary shall not finance
6 more than 50 per centum of the total costs of natural gas
7 utilization technologies selected under this section as estimat-
8 ed by the Secretary as of the date of award of financial assist-
9 ance.

10 (d) AUTHORIZATION.—There is authorized to be appro-
11 priated to the Secretary such sums as may be necessary to
12 carry out a program in fiscal years 1992, 1993, and 1994,
13 under this section.

14 SEC. 6004. NATURAL GAS SUPPLY ENHANCEMENT.—

15 (a) PROGRAM.—The Secretary shall carry out a program of
16 research, development and demonstration to increase the re-
17 coverable natural gas resource base including, but not limited
18 to, the following areas:

19 (1) More intensive recovery of natural gas from
20 discovered conventional resources;

21 (2) Economic recovery of unconventional natural
22 gas resources, including gas from tight sands, Eastern
23 shales, and gas from less permeable formations, coal-
24 bed methane and geopressurized reservoirs;

25 (3) Surface gasification of coal; and

1 (4) Recovery of methane from biofuels including
2 municipal solid waste.

3 (b) COOPERATIVE AGREEMENTS.—The Secretary shall
4 enter into cooperative agreements under this section.

5 (c) COST SHARE.—The Secretary shall not finance
6 more than 50 per centum of the total costs of a project select-
7 ed under this section as estimated by the Secretary as of the
8 date of award of financial assistance.

9 (d) AUTHORIZATION.—There is authorized to be appro-
10 priated to the Secretary such sums as may be necessary to
11 carry out a program in fiscal years 1992, 1993, and 1994,
12 under this section.

 * * * * * * *

8 TITLE X—NATURAL GAS

9 SEC. 10001. OPTIONAL PROCEDURES FOR THE CONSTRUCTION
10 OF NATURAL GAS FACILITIES.

11 (a) DEFINITIONS.—For the purposes of this section the
12 term—

13 (1) “Commission” means the Federal Energy
14 Regulatory Commission;

15 (2) “transportation service” means the transporta-
16 tion in interstate commerce of natural gas by a natu-
17 ral-gas company for itself or any other person;

18 (3) “rate schedule” means a statement of a rate
19 or charge for a particular classification of transporta-
20 tion in interstate commerce of natural gas, and all
21 terms, conditions, classifications, practices, rules and
22 regulations affecting such rate or charge.

23 (4) “rate” means a rate or charge demanded or
24 received for a particular classification of transportation
25 in interstate commerce of natural gas, and all terms,

1 conditions, classifications, practices, rules and regula-
2 tions affecting such rate or charge.

3 (b) CERTIFICATE OF PUBLIC CONVENIENCE AND NE-
4 CESSITY.—

5 (1) CONSTRUCTION.—For the purposes of section
6 7 of the Natural Gas Act, a certificate of public con-
7 venience and necessity is not required for the construc-
8 tion of a facility to provide transportation service: *Pro-*
9 *vided*, That the construction of such facility commences
10 after the date of enactment of the National Energy Se-
11 curity Act of 1991.

12 (2) OPERATION.—Upon the initiation of transpor-
13 tation service rendered by a facility constructed pursu-
14 ant to paragraph (1), the Commission, pursuant to its
15 authority under section 7 of the Natural Gas Act, shall
16 immediately issue a certificate of public convenience
17 and necessity for such transportation service. The nat-
18 ural-gas company shall accept the certificate. The cer-
19 tificate shall include such reasonable terms and condi-
20 tions as the public convenience and necessity may re-
21 quire.

22 (c) RATE SCHEDULES; BOOKS, ACCOUNTS AND
23 RECORDS, AND RATE REVISIONS.—

24 (1) RATE SCHEDULES.—

1 (i) Prior to initiating transportation service
2 utilizing a facility constructed pursuant to para-
3 graph (b)(1), the natural-gas company shall file
4 with the Commission the rate schedule for such
5 facility.

6 (ii) The natural-gas company shall keep in
7 convenient form and place and make open for
8 public inspection the rate schedule for such facili-
9 ty.

10 (iii) An agreement between the natural-gas
11 company and a person, including itself, who con-
12 tracts for transportation service to be rendered
13 utilizing such facility, may constitute a rate sched-
14 ule: *Provided*, That such agreement is inclusive of
15 all data and information required to be set forth in
16 a rate schedule.

17 (iv) The rate for a facility constructed pursu-
18 ant to paragraph (b)(1) shall be established on a
19 stand-alone and incremental basis.

20 (2) BOOKS, ACCOUNTS AND RECORDS.—A natu-
21 ral-gas company that constructs a facility pursuant to
22 paragraph (b)(1) shall maintain a separate system of
23 books, accounts and records for such facility.

24 (3) RATE REVISIONS.—

1 (i) Upon its own motion or upon a complaint
2 by any person, the Commission shall review the
3 rate for a facility constructed pursuant to para-
4 graph (b)(1) to ascertain whether there is a rea-
5 sonable basis to conclude that such rate may be
6 unjust, unreasonable, unduly discriminatory or
7 preferential within the meaning of the Natural
8 Gas Act.

9 (ii) If, as a result of such review, the Com-
10 mission determines that there is a reasonable basis
11 to conclude that such rate may be unjust, unrea-
12 sonable, unduly discriminatory or preferential,
13 pursuant to its authority under section 5 of the
14 Natural Gas Act the Commission shall initiate a
15 proceeding to determine if the rate is unjust, un-
16 reasonable, unduly discriminatory or preferential
17 within the meaning of the Natural Gas Act.

18 (iii) If, as a result of the proceeding initiated
19 under section 5 of the Natural Gas Act, the Com-
20 mission finds that such rate is unjust, unreason-
21 able, unduly discriminatory or preferential within
22 the meaning of the Natural Gas Act, pursuant to
23 its authority under section 5 of the Natural Gas
24 Act the Commission shall determine the just and
25 reasonable rate, charge, classification rule, regula-

1 tion, practice, or contract to be thereafter ob-
2 served and in force, and shall fix the same by
3 order.

4 (d) **RATE BASE TREATMENT.**—A natural-gas company
5 may not, for ten years subsequent to the date on which a
6 facility constructed pursuant to paragraph (b)(1) was placed
7 into service, allocate the costs incurred for the construction,
8 operation or maintenance of such facility to any other service
9 rendered by such company.

10 (e) **OTHER LAWS.**—Except as expressly provided in
11 this section, facilities constructed under authority of para-
12 graph (b)(1) shall be subject to all applicable federal and state
13 laws.

14 **SEC. 10002. TRANSPORTATION OF NATURAL GAS UNDER THE**
15 **NGPA.**

16 Section 311 of the Natural Gas Policy Act of 1978 (15
17 U.S.C. 3371) is amended by—

18 (a) striking “**AUTHORIZATION OF CERTAIN**
19 **SALES AND TRANSPORTATION**” and inserting in
20 lieu thereof “**AUTHORIZATION OF CERTAIN**
21 **SALES, TRANSPORTATION AND CONSTRUC-**
22 **TION**”;

23 (b) striking “Commission Approval of Transporta-
24 tion” and inserting in lieu thereof “Commission Ap-
25 proval of Transportation and Construction”; and by

1 (c) striking paragraph 311(a)(1), and inserting in
2 lieu thereof the following:

3 “(1) INTERSTATE PIPELINES.—

4 “(A) TRANSPORTATION.—The Commission
5 may, by rule or order, authorize any interstate
6 pipeline to transport natural gas on behalf of any
7 other person.

8 “(B) CONSTRUCTION.—The Commission
9 may, by rule or order, authorize the construction
10 of facilities to transport natural gas in interstate
11 commerce pursuant to subparagraph (A).

12 “(C) JUST AND REASONABLE RATES.—The
13 rates and charges of any interstate pipeline with
14 respect to any transportation authorized under
15 subparagraph (A) shall be just and reasonable
16 (within the meaning of the Natural Gas Act).

17 “(D) NON-DISCRIMINATORY TRANSPORTA-
18 TION.—Any transportation authorized under sub-
19 paragraph (A) shall not be unjust, unreasonable,
20 unduly discriminatory or preferential (within the
21 meaning of the Natural Gas Act).”.

22 SEC. 10003. NEPA COMPLIANCE.

23 (a) LEAD AGENCY.—In cases where Federal Energy
24 Regulatory Commission authorization of the construction or
25 operation of facilities or projects under the Natural Gas Act

1 or the Federal Power Act may be deemed a major Federal
2 action under the National Environmental Policy Act or re-
3 quires the preparation of other environmental documents, the
4 Commission shall be the lead agency and shall have primary
5 authority for compliance with section 2 and title I of the
6 National Environmental Policy Act. The Commission may
7 set reasonable time limits for consultation with other Federal
8 agencies which participate in the review of a proposed facility
9 or project pursuant to the National Environmental Policy Act
10 to complete their review of any potential environmental im-
11 pacts of the construction or operation of such facility or
12 project, and for such other agencies to consult and submit
13 comments to the Commission.

14 (b) ENVIRONMENTAL DOCUMENTS.—Where environ-
15 mental documents are prepared in connection with applica-
16 tions for authority to construct or operate facilities or projects
17 under the Natural Gas Act or the Federal Power Act, the
18 Federal Energy Regulatory Commission shall permit, at the
19 election of the applicant, a contractor, consultant or other
20 person funded by the applicant to prepare such environmental
21 document. The contractor shall be chosen by the Commission
22 in its sole discretion. The Commission shall establish proce-
23 dures to assure that the contractor, consultant or other
24 person has no financial or other potential conflict of interest
25 in the outcome of the proceeding. Nothing herein shall affect

1 the Commission's responsibility to comply with the National
2 Environmental Policy Act.

3 **SEC. 10004. RATES AND CHARGES.**

4 (a) **NOTICE OF CHANGES.**—The first and third sen-
5 tences of section 4(d) of the Natural Gas Act (17 U.S.C.
6 717c(d)) are amended by striking "thirty days' notice" and
7 inserting in lieu thereof "sixty days' notice".

8 (b) **REFUNDS OF OVERCHARGES.**—The third and
9 fourth sentences of section 4(e) of the Natural Gas Act (17
10 U.S.C. 717c(e)) are amended to read as follows: "Where
11 changes in rates or charges are thus made effective, the
12 Commission may, by order, require the natural-gas company
13 to furnish a bond, to be approved by the Commission, to
14 refund any amounts ordered by the Commission, to keep ac-
15 curate accounts in detail of all amounts received by reason of
16 such changes, specifying by whom and in whose behalf such
17 amounts were paid, and, upon completion of the hearing and
18 decision, to order the natural-gas company to refund, with
19 interest, the portion of such rates or charges by its decision
20 found to be not justified. At any hearing involving a rate or
21 charge sought to be changed, the burden of proof to show
22 that the changed rate or charge is just and reasonable shall
23 be upon the natural-gas company, and the Commission shall
24 give to the hearing and decision of such questions preference

1 over other questions pending before it and decide the same as
2 speedily as possible.”.

3 **SEC. 10005. UTILIZATION OF RULEMAKING PROCEDURES.**

4 The first sentence of section 403(c) of the Department
5 of Energy Organization Act (42 U.S.C. 7173(c)) is amended
6 to read as follows: “Any function described in section 402 of
7 this Act which relates to the establishment of rates and
8 charges under the Federal Power Act or to the establishment
9 of rates and charges, the issuance of a certificate of public
10 convenience and necessity, or the abandonment of facilities
11 and services under the Natural Gas Act may be conducted by
12 rulemaking procedures.”.

13 **SEC. 10006. REVIEW OF COMMISSION ORDERS.**

14 **(a) NATURAL GAS ACT AMENDMENTS.—**

15 **(1) REHEARING.**—Section 19(a) of the Natural
16 Gas Act (15 U.S.C. 717r(a)) is amended by striking
17 “Unless the Commission acts upon the application for
18 rehearing within thirty days after it is filed, such appli-
19 cation may be deemed to have been denied.” and in-
20 serting in lieu thereof “Unless the Commission issues a
21 final order on the application for rehearing within sixty
22 days after it is filed, such application shall be deemed
23 denied: Provided, That the Commission may, for ex-
24 traordinary cause, extend the period for rehearing an
25 additional sixty days.”.

1 (2) COURT REVIEW.—Section 19(b) of the Natu-
2 ral Gas Act (15 U.S.C. 717r(b)) is amended by striking
3 the first through third sentences and inserting the fol-
4 lowing in lieu thereof: “Any party to a proceeding
5 under this Act aggrieved by an order issued by the
6 Commission in such proceeding may obtain a review of
7 such order in the circuit court of appeals of the United
8 States for any circuit wherein the natural-gas company
9 to which the order relates is located or has its principal
10 place of business, or in the United States Court of Ap-
11 peals for the District of Columbia, by filing in such
12 court, within thirty days after the order of the Com-
13 mission upon the application for rehearing, a written
14 petition praying that the order of the Commission be
15 modified or set aside in whole or in part. The petition
16 shall set forth specifically the ground or grounds upon
17 which such petition is based. A copy of such petition
18 shall forthwith be transmitted by the clerk of the court
19 to the chairman of the Commission and thereupon the
20 Commission shall file with the court the record upon
21 which the order complained of was entered, as provid-
22 ed in section 2112 of title 28, United States Code.”.

23 (b) NATURAL GAS POLICY ACT AMENDMENTS.—

24 (1) REHEARING.—Section 506(a)(2) of the Natu-
25 ral Gas Policy Act of 1978 (15 U.S.C. 3416(a)(2)) is

1 amended by striking "Unless the Commission acts
2 upon such application for rehearing within thirty days
3 after it is filed, such application shall be deemed to
4 have been denied." and inserting in lieu thereof
5 "Unless the Commission issues a final order on the ap-
6 plication for rehearing within sixty days after it is filed,
7 such application shall be deemed denied: *Provided*,
8 That the Commission may, for extraordinary cause,
9 extend the period for rehearing an additional sixty
10 days."

11 (2) COURT REVIEW.—Section 506(a)(4) of the
12 Natural Gas Policy Act (15 U.S.C. 3416(a)(4)) is
13 amended by striking the first through third sentences
14 and inserting the following in lieu thereof: "Any person
15 who is a party to a proceeding under this Act ag-
16 grieved by any final order issued by the Commission in
17 such proceeding may obtain review of such order in the
18 United States Court of Appeals for any circuit in
19 which the party to which such order relates is located
20 or has its principal place of business, or in the United
21 States Court of Appeals for the District of Columbia
22 circuit. Review shall be obtained by filing a written pe-
23 tition, requesting that such order be modified or set
24 aside in whole or in part, in such Court of Appeals
25 within thirty days after the final action of the Commis-

1 sion on the application for rehearing required under
2 paragraph (2). The petition shall set forth specifically
3 the ground or grounds upon which such petition is
4 based. A copy of such petition shall forthwith be trans-
5 mitted by the clerk of the court to the chairman of the
6 Commission and thereupon the Commission shall file
7 with the court the record upon which the order com-
8 plained of was entered, as provided in section 2112 of
9 title 28, United States Code.”.

10 SEC. 10007. LIMITED ANTITRUST RELIEF FOR INDEPENDENT
11 GAS PRODUCER COOPERATIVES.

12 (a) DEFINITIONS.—For the purposes of this section, the
13 term—

14 (1) “antitrust laws” shall mean the Federal laws
15 defined in section 2(37) of the Natural Gas Policy Act
16 of 1978;

17 (2) “independent producer” means any person
18 whose natural gas production does not exceed six mil-
19 lion cubic feet per day: *Provided*, That any person who
20 is an interstate pipeline, intrastate pipeline or local dis-
21 tribution company, as defined in sections 2(15), (16),
22 and (17) of the Natural Gas Policy Act of 1978, or
23 who is an affiliate of such person, as defined in section
24 2(27) of the Natural Gas Policy Act of 1978, may not

1 be considered an independent producer for the purposes
2 of this section;

3 (3) "independent producer cooperative" shall
4 mean any group of independent producers formed and
5 operated for the purpose of pooling natural gas to
6 enable the cooperative members to bargain effectively
7 for the sale of the natural gas to any person: *Provided*,
8 That such group is not formed or operated for the pur-
9 pose of raising prices.

10 (b) LIMITED ANTITRUST RELIEF.—

11 (1) In any civil action under the antitrust laws,
12 the formation or operation of an independent producer
13 cooperative shall not be deemed illegal per se, but shall
14 be illegal only if the anticompetitive effects substantial-
15 ly outweigh the procompetitive effects.

16 (2) Nothing in this section shall affect the ability
17 of the United States, any State or a private party from
18 obtaining an injunction against an independent produc-
19 er cooperative for conduct that is proven to be illegal
20 under the standard set forth in paragraph (1).

21 SEC. 10008. VEHICULAR NATURAL GAS JURISDICTION.

22 (a) DEFINITIONS.—For the purposes of this section—

23 (1) the term "VNG" means natural gas for ulti-
24 mate use as a fuel in a motor vehicle, and includes
25 compressed natural gas.

1 (2) the term "Motor Vehicle" includes any auto-
2 mobile, truck, bus, van, or other on-road or off-road
3 motor vehicle, including a boat.

4 (b) PERSONS WITH HINSHAW EXEMPTIONS.—

5 (1) PLACE OF ULTIMATE CONSUMPTION.—For
6 purposes of section 1(c) of the Natural Gas Act, in the
7 case of any sale of VNG, such VNG shall be deemed
8 to be "ultimately consumed" within the State in which
9 physical delivery of such VNG occurs, whether or not
10 physical combustion of such VNG occurs in another
11 State.

12 (2) STATE REGULATION.—For purposes of sec-
13 tion 1(c) of the Natural Gas Act, certification from a
14 State commission to the Federal Energy Regulatory
15 Commission that such State commission has regulatory
16 jurisdiction over the rates, services and facilities of a
17 person (who receives natural gas from another person
18 within or at the boundary of a State all of which natu-
19 ral gas so received is ultimately consumed within such
20 State) and is exercising such jurisdiction shall consti-
21 tute conclusive evidence of such regulatory power or
22 jurisdiction even in cases where such State commission
23 does not have jurisdiction by reason of State law, or is
24 not exercising jurisdiction, over the sale for resale or
25 transportation of VNG.

1 (c) PERSONS WITH SERVICE AREA DETERMINA-
2 TIONS.—For purposes of the Natural Gas Act—

3 (1) SALE FOR RESALE.—In the case of a sale for
4 resale of VNG by the holder of a service area determi-
5 nation under section 7(f) of the Natural Gas Act, such
6 sale for resale shall be subject to the exclusive jurisdic-
7 tion of the State commission in the State in which
8 physical delivery of such VNG occurs, whether or not
9 physical combustion of such VNG occurs in another
10 State.

11 (2) TRANSPORTATION.—In the case of transpor-
12 tation of VNG by the holder of a service area determi-
13 nation under section 7(f) of the Natural Gas Act, such
14 VNG shall for purposes of section 7(f)(2) of the Natural
15 Gas Act be deemed to be “consumed” within the State
16 in which physical delivery of such VNG occurs, wheth-
17 er or not physical combustion of such VNG occurs in
18 another State.

19 (3) STATE REGULATION.—In case of a sale for
20 resale of VNG, or the transportation of VNG, by a
21 holder of a service area determination under section
22 7(f) of the Natural Gas Act, such sale for resale or
23 transportation shall be deemed to be subject to the ex-
24 clusive jurisdiction of the State commission of the State
25 in which such sale for resale or transportation occurs

- 1 whether or not the sale for resale or transportation of
- 2 VNG is subject to the jurisdiction of the State commis-
- 3 sion under State law.

* * * * * * *

The CHAIRMAN. Senator Bingaman.

STATEMENT OF HON. JEFF BINGAMAN, U.S. SENATOR FROM NEW MEXICO

Senator BINGAMAN. Mr. Chairman, I have a short statement that I would just put in the record, with your permission, and would like to indicate that I think this is an important hearing. I think the initiatives that you have in your bill will go a long way toward improving the efficiency of the market.

And we do have some amendments that I have put together that I would like to offer which makes some incremental improvements in the Natural Gas Act. And I also have some questions about the proposals that the administration has made, but I will go into those in the question period.

[The prepared statement of Senator Bingaman and attachments follow:]

PREPARED STATEMENT OF HON. JEFF BINGAMAN, U.S. SENATOR FROM NEW MEXICO

Mr. Chairman, title X of S. 341 of which we are considering today, offers an opportunity to make substantial improvements in the law governing the natural gas industry. The public will benefit from changes in the law that will allow consumers to get natural gas more efficiently. I applaud the objectives of title X and have offered a series of amendments which I believe complements the approach taken in the bill.

The health of the natural gas industry is critical to my state. New Mexico is ranked fourth among the states in gas production (950 billion cubic feet in 1990) and is ranked second in onshore natural gas reserves (19 trillion cubic feet). Proved reserves of natural gas should top 30 trillion cubic feet by 1995, principally due to coal seam gas development in the San Juan Basin. In 1990, New Mexico-produced natural gas brought approximately \$1.5 billion in revenues to New Mexico's natural gas industry.

My amendments are directed principally at making incremental, yet important, improvements in the procedure under section 7 of the Natural Gas Act for the authorization of pipeline construction. While some pipelines may take advantage of the so-called non-certificate options for pipeline construction, I believe that most will continue to use the traditional section 7 procedure. Therefore, we should take steps to improve that process. I look forward to our witnesses' testimony on this point.

The President's National Energy Strategy Act has only just been introduced. Thus, there has been little opportunity to study the bill, however, two points stand out.

First, the President's bill proposes to deregulate natural gas imports and exports. Until there is comparability in the regulatory treatment at natural gas on both sides of the border, I question the wisdom of amending section 3 to deregulate imports.

Second, the President's bill proposes an optional certificate procedure and a non-jurisdictional option for the construction of new natural gas pipelines. Under neither of these options is a pipeline required to file its rates with the FERC. I question whether these proposed procedures provide adequate protection for potential natural gas shippers, such as independent producers, who might not get an initial allocation of capacity on a new pipeline or who might be faced with a rate that puts them at a significant disadvantage.

In conclusion, I am skeptical about the details of some of the natural gas initiatives in the NES bill. I do believe, however that we have an opportunity to make real improvements in the law, and am I willing to work with DOE, the FERC and the industry towards this goal.

[Attachment.]

[Amendments to Title X of S. 341]

1. Environmental Contractors

Amend section 10003(b) to specify that an applicant may select a contractor to prepare environmental documents (environmental impact statements and environmental assessments) in connection with an application under the Natural Gas Act (NGA) or the Federal Power Act (FPA) from a list of such contractors determined by the Federal Energy Regulatory Commission (FERC) to be qualified to do such work. As introduced, section 10003(b) specified that such contractor shall be chosen by the FERC in its sole discretion.

2. Environmental Assessments

Amend section 10003 to add a new subsection (c) directing the FERC to: (i) permit an applicant, or a contractor selected by an applicant, to prepare an environmental assessment (EA); and (ii) adopt procedures to facilitate the submission of an applicant-prepared EA as part of the application submitted pursuant to the NGA or the FPA.

3. Ex Parte Rules

Amend section 10003 to add a new subsection (d) directing the FERC to amend its rules governing ex parte communications to clarify: (i) that such rules do not apply to communications with other Federal agencies as part of the NEPA process; and (ii) the general scope of such rules.

4. Unopposed Applications

Add a new section 10009 amending NGA section 7(c)(1) to provide that: (i) where no protest is received within 60 days of public notice of an application for a certificate of public convenience and necessity, the certificate shall be deemed to be issued; and (ii) the FERC shall institute a procedure for dealing expeditiously with protests that do not raise material issues of fact. Similar to section 2(e) of H.R. 779, the Natural Gas Enhancement Act of 1991.

5. Replacement Facilities

Add a new section 10010 amending NGA section 7(c)(1) to provide that the term "facilities" as used in NGA section 7 shall not include natural gas facilities that constitute the repair or replacement of existing facilities that have become physically deteriorated or obsolete provided that such activities do not result in the reduction or abandonment of service or an increase in delivery capacity. Similar to section 2(d) of H.R. 779.

6. Conclusive Evidence of Need

Add a new section 10011 amending NGA section 7(c)(1) to provide that contractual commitments for firm service to be rendered utilizing proposed facilities shall be conclusive evidence of need and shall be sufficient to dismiss any claim of mutual exclusivity by another applicant.

7. Phased Certificate Procedures

Add a new section 10012 amending NGA section 7(c) to provide that the FERC may: (i) phase its consideration of issues raised in connection with an application for a certificate of public convenience and necessity; and (ii) issue an initial order containing preliminary findings with respect to such issues which order shall be subject to rehearing. The issuance of a certificate will remain subject to a final order based on the complete record of the proceeding. This section codifies the phased certificate procedure currently used by the FERC.

8. Procedure for Priority Natural Gas Facilities

Add a new section 10013 amending NGA section 7 to add a new section 7(i) to authorize the Chairman of the FERC, in consultation with the Secretary of Energy, to designate pipeline projects for fast track administrative and judicial review. Designation would be made on the basis of an applicant's *prima facie* showing of the proposed facility's potential to displace imported oil, fuel electric generation, contribute to environmental compliance, or further other national energy policy objectives. This procedure would expedite the certificate process, as well as the process for the issuance of other Federal authorizations for the construction and initial operation of a facility, but would not predetermine whether the certificate or other authorizations should be issued.

9. Nonjurisdictional Facilities

Add a new section 10014 amending NGA sections 1(b) and 1(c) to clarify that the FERC shall not infer any responsibility or control over nonjurisdictional activities for purposes of carrying out its responsibilities under the NGA or other Federal laws. The amendment is intended to address the FERC's practice as part of the NEPA process of reviewing nonjurisdictional facilities that are constructed with, or related to, a jurisdictional project.

The CHAIRMAN. Thank you very much, Senator Bingaman, and thank you for your help in being so involved in this section.
Senator Wirth.

STATEMENT OF HON. TIMOTHY E. WIRTH, U.S. SENATOR FROM COLORADO

Senator WIRTH. Thank you, Mr. Chairman. I thank you very much for having this hearing. I think that focusing on natural gas is enormously important. My own priority is that we ought to be doing everything we possibly can to be encouraging alternatives to imported oil, meaning very clearly the enormously abundant resource that we have in the area of natural gas.

I want to hear from the administration about ideas that they have and how we might even more aggressively pursue the conversion of much of our vehicle fleet to the use of natural gas, which it seems to me is a major opportunity for us. I thought there were some good ideas in the original draft of the National Energy Strategy from the Department of Energy which got lost in the White House. And I think we want to be able to resuscitate those.

I also have some concerns about the recommendations made about FERC. I think that there is some real virtue in allowing or having a debate among five commissioners of FERC over various policies, and I think that, in many ways, has served us well.

Finally, as you know, Mr. Chairman, our staffs have been working together and you and I have talked about changes that we might be able to make in the law to more aggressively encourage both the production of natural gas and bringing that natural gas to market. As you know, in my section of the country, we have the second largest reserves of natural gas in the United States, outside of the Gulf coast, running from the overthrust belt down into the San Juan Basin and the New Mexico area. So Senator Bingaman and I share many, many interests in that area and look forward to working with you and seeing what we might be able to do.

I thank you for your help on this. I think there is a really strong coalition for promoting this resource. We can make some real progress. Thank you.

The CHAIRMAN. Thank you very much, Senator Wirth. I might add, as I mentioned in the statement, we want to beef up this section, particularly with fleet use of natural gas. I think the NES contains that. I have not personally looked over that. I know the staff has looked over that but I believe something along a very strong fleet provision, we ought to put in this. And I hope we can speak about that today, Steve.

And Senator Bingaman's amendments we are very interested in as well.

Senator Burns, do you have any comments?

Senator BURNS. I would assume that they are—our witnesses have not spoken a word yet. And I would withhold my statements, although I share the same interest as Senator Wirth and Senator Bingaman because we are all a part of that overthrust belt, too. And so I think it is going to be the fuel of the future.

I am a little bit concerned that when they go to allocating R&D money that we talk about a lot of R&D, then we get down to where it talks about natural gas, that money sort of peters out down there. And I think we ought to put a little more emphasis on that.

But other than that, I am interested in hearing from our witnesses. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much.

We begin today with an excellent panel: Steve Wakefield, who is General Counsel of DOE, and Bill Scherman who is General Counsel of FERC.

And if you will begin, Steve.

**STATEMENT OF STEPHEN A. WAKEFIELD, GENERAL COUNSEL,
DEPARTMENT OF ENERGY**

Mr. WAKEFIELD. Thank you Mr. Chairman, members of the committee. I have submitted a fairly detailed statement for the record and I would like to summarize it at this time.

I am pleased to be here to discuss the administration's views on the need for legislation in the natural gas area and specifically title X of S. 341 and title II of the National Energy Strategy Act.

While some areas of the NES may be contentious, I believe there is a consensus that we need to use more natural gas in this country. It is environmentally clean, we have an adequate domestic resource base, and it is economically attractive. Despite this fact, consumption today is 10 percent less than it was 20 years ago.

The primary reason in our view is that, despite deregulation at the wellhead, the industry remains under pervasive regulation. There are statutory requirements to obtain Government approvals to build facilities, to abandon facilities, to start new transportation or sales, to stop existing transportation or sales, and all the while the Government regulates the rates, charges, and the ways the parties conduct their business.

The main objective of the administration's legislation is to remove regulation that is unnecessary to protect the consumer. If someone is willing to take the risk to build facilities, it should be the investors and the lenders, not the regulators, who assess whether that is a good idea.

If consenting adults can agree on a commercial transaction, whether it is for the transportation or sale of natural gas, they should be able to structure their own deal without the imposition of the regulator's views that one size should fit all customers and without having their competitors seek to delay or condition the transaction in extended regulatory hearings.

Regulation, in our view, should be reserved for when it is needed to protect the consumers, not when it is used as a tool to protect competitors.

We start, Mr. Chairman, from the proposition that the status quo is not working. If we are serious about increasing natural gas use

in this country, the current system of regulation needs a major overhaul, not just tinkering around the edges or asking people at FERC to work harder.

Our goal is to try to increase the size of the pie, not the size of the individual slices. We have sought in our approach to the legislation to avoid issues such as bypass or take-or-pay that would pit one segment of the industry against another and try to come up with an approach that all segments of the industry can agree upon.

Conceptually, our approach is to give parties options for constructing pipeline facilities. A pipeline might use one option in one set of circumstances, another in another set. We also recognize that there are some in the business who are more aggressive, more willing to take risks than others and there are some in the industry that are more risk averse. We have tried to accommodate all of these interests and all of the circumstances, rather than trying to force a single approach upon everyone.

For relatively minor transactions, pipelines could construct facilities for transportation on behalf of any person under section 311 of the Natural Gas Policy Act. This is consistent with existing law, clarifies some difficulties that occurred in a court decision last year, and enables parties to go forward on relatively minor facilities without the need for prior FERC approval.

We have, in the legislation, Mr. Chairman, optional procedures that a pipeline or any person seeking to construct new facilities may choose to use. One is jurisdictional, which requires a certificate of "public convenience and necessity." The other is non jurisdictional, it would not require a certificate for "public convenience and necessity." The basic difference between the two approaches is that if someone comes in and obtains a certificate, they are required to go through an environmental review under the National Environmental Policy Act. But at the end of the day, they can get the right of condemnation under Federal eminent domain rights.

Under the non-jurisdictional option, they do not have the NEPA review at the FERC, although there would possibly still be NEPA review by other Federal agencies or State agencies. But since the non-jurisdictional option does not get a certificate, they do not get a Federal right to eminent domain. Someone would have to choose, based upon where they were building their facilities, which approach was better. Can they use a quicker approach, probably more relevant in producing States that are more used to pipelines, or do they need the right of Federal eminent domain, which they probably will come to the conclusion they do if they are building a pipe to the Northeast or to the West Coast.

Under either approach, there would not be hearings by competitors. Competitors would not be able to come in and challenge the need for the facilities or competitors or the regulators would not be able to question the economic terms and conditions under which the pipeline proposes to go forward.

The facilities would be at the total risk of the proponent. I understand your point, Mr. Chairman, about not wanting overbuilding of pipeline capacity. It would be up to the investment community to determine whether the funds were going to be available to build a pipeline, and it would be incremental to the pipeline's other jurisdictional facilities.

If the pipeline has been built at total risk and it does not work out, the person building the facility cannot come back in and try to visit upon his jurisdictional customers the cost and expenses that did not work out for him. It is going to be up to him and up to his investors and stockholders to eat those costs.

So I think that risk is enough, as it is in most other industries in this country, to persuade people to look very carefully at whether the new facilities are really justified.

Pipelines would be permitted to reach agreements with shippers or customers on how they structure their transaction without the requirement for FERC approval. There would be no NGA section 4 requirements that they show the rates and charges are just and reasonable, nor would there be subsequent NGA section 5 review by the Commission in later years.

Additionally, somebody that already has certificated facilities could seek abandonment of those facilities or of individual services, if the customers agreed, so that they could go on the totally negotiated commercial approach without having FERC bless every transaction and every term and condition of every transaction that they undertake.

Additionally, pipelines can continue to use the traditional NGA section 7(c) certificate of public convenience and approach. We all know that is a lengthy process. There are some good amendments to help speed up that process, but it is still going to take awhile to go through that process. But at the end of the day the pipeline has a certificate of public convenience and necessity and can assess the risk in going forward and make that determination at the time.

We also recognize, Mr. Chairman, that there is still the need for some regulation in the area. This is not going to be an industry that anytime in the foreseeable future can be totally deregulated. Under any of the options that I have indicated, shippers have the right to come in to FERC and assert that they are being unduly discriminated against, to allege that the pipeline is treating someone else who is similarly situated in a better manner and ask that they get the same deal. The pipeline can come back and seek to demonstrate why the shipper is not being unduly discriminated against. Service can commence within 60 days at the pipeline's proposal, subject to refund down to what the shipper proposed, but the burden is on the pipeline to establish he is not unduly discriminated against.

To protect shippers, there is a provision allowing them to go to FERC to seek mandatory interconnection into the pipeline. This is in addition to the interconnection authorizing for out-of-the pipeline facilities that exist under NGA 7(a) today.

Mr. Chairman, complementary to the reduced regulation that was developed under the National Energy Strategy, the administration is proposing legislation that has been developed through the Vice President's Competitiveness Council. As you mentioned it would relate to the future of the Federal Energy Regulatory Commission.

I want to say that there is absolutely no criticism of Martin Allday meant by this. Everyone in the administration believes that he has done a very fine job, but he has inherited a structure that is difficult. It is impossible to coordinate natural gas policy within the

executive branch. The Secretary of Energy is prohibited by law from discussing with the chairman of FERC policy matters. The President of the United States cannot pick up the telephone and ask the chairman of the FERC what his natural gas policies are or suggest to him what he thinks they should be.

The existing structure limits the ability of Congress to inquire into the policy directions of the independent agency. I am sure you have sat through many hearings in which you have asked the chairman or commissioners about a particular policy and the reply has been, I cannot discuss that. That is a matter that is before me. I have not noticed similar inhibitions when the Secretary of Energy is up here on his ability to tell you what his policies are and where he is going.

We need the ability to develop and implement energy policy and specifically natural policy from the top, not filtering up through adjudicated hearings. Our proposal would roll FERC into a single administrator, heading the Natural Gas and Electricity Administration, who would report to the Secretary of Energy. He would be removable. He would be answerable to Congress. Policy would be coordinated at the top. The need for the adjudicatory process through independent administrative law judges would be preserved, but those administrative law judges would be there to implement, not to make, policy.

Mr. Chairman, we believe that S. 341 moves in the same direction as title II of the NES Act. It contains some restrictions on activities which may inhibit progress toward negotiated commercial transactions rather than through regulatory mandate. The administration however, looks forward to working with this committee to achieve the best bill possible to meet all of our objectives.

Thank you very much, Mr. Chairman.

[The prepared statement of Mr. Wakefield follows:]

STATEMENT OF
STEPHEN A. WAKEFIELD
GENERAL COUNSEL
U.S. DEPARTMENT OF ENERGY

BEFORE THE
SENATE ENERGY COMMITTEE

MARCH 7, 1991

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I. Introduction

I appreciate the opportunity to be with you today to discuss the Administration's views on Title II of the proposed National Energy Strategy (NES) Act and S. 341 introduced by you and Senator Wallop.

Mr. Chairman, I would like to say at the outset that S. 341 reflects policy imperatives and objectives very similar to those embodied in the NES Act. In developing the National Energy Strategy, we found virtual unanimity of opinion throughout the government, industry and public that natural gas can, and should, play a larger role in meeting the Nation's overall energy needs. We also found little quarrel with the fact that regulatory requirements are inhibiting the ability of natural gas to fulfill its potential. Natural gas is domestically abundant, environmentally clean and extremely price competitive. Yet, despite a rise in overall national energy consumption, total domestic use of natural gas is substantially less today than it was in 1970. There has been an obvious failure in the last twenty years to take advantage of this tremendous national asset. This failure must be addressed today.

Deputy Energy Secretary Henson Moore, testifying before the Senate Energy Committee on September 26, 1989, observed that

given "continuing market distortions, DOE draws the conclusions that we must . . . develop a second generation of natural gas statutory and regulatory reform." He further spoke about making new capacity available, providing proper incentives and eliminating unnecessary regulation. We are glad that both S.341 and the NES Act reflect Deputy Secretary Moore's observations.

The Persian Gulf crisis is a disturbing reminder of the Nation's vulnerability to disruptions in world oil markets. Natural gas is an environmentally preferred, secure and cost effective alternative to oil. However, until legislative actions are taken which will remove the regulatory impediments to the expansion of the natural gas industry, the contribution of natural gas to the Nation's long-term energy security will remain restricted.

The natural gas industry is substantially different today than it was in 1938, when the Natural Gas Act (NGA) was passed. Evolving from its pre-World War II infancy in which a handful of pipelines were beginning to reach out from producing areas, the industry has matured, with scores of interstate and intrastate pipelines serving every major metropolitan area in the continental U.S. The prior natural gas transportation and sales monopolies are being replaced by multiple competitors for sales on every major pipeline. Additionally, transportation alternatives are being made available to both producers and

consumers. Natural gas is a competitive business, and consumers will benefit immensely if the decisions of regulators are replaced with the decisions of the commercial world.

The experience of regulation at the wellhead should not be forgotten. For two decades, the federal regulators controlled the price at which producers could sell their product to the interstate market. The result was shortages, curtailments, and other adverse economic consequences to consumers and the industry alike. Moreover, the regulators proceeded from the premise that we were about to dissipate our supply of natural gas. Those regulators were proven to be incorrect when their decisions were replaced by the incentives of the marketplace commencing with the enactment of the Natural Gas Policy Act of 1978. Within five years, chronic shortages were replaced with surpluses, prices fell well below equivalent fuel oil prices, and the natural gas resource base was expanded to a size sufficient to meet our needs for decades to come.

Despite this growth in infrastructure and supply, however, both relative and absolute consumption of natural gas has declined. Mr. Chairman, it is difficult, of course, to pinpoint precisely all of the reasons for the country's failure to develop adequately this resource. There are, however, some fairly obvious problems that Title II of the NES Act addresses. Generally, the industry has reached the stage where it will react

more favorably to the stimulus of competition rather than to the dead hand of regulation. However, because since 1938 the natural gas industry has been so pervasively regulated, a "regulated mentality" has developed which directly and adversely shapes business decisions. The lethargic, costly and cumbersome procedures of the existing statutory and regulatory scheme, taken together with the climate of uncertainty that the scheme injects into the industry's decisionmaking process, frequently provide industry participants with limited incentive to develop new markets aggressively. There are simply not enough risk-taking incentives for the industry to engage in more dynamic and expansive practices. At best, a substantial part of the natural gas industry currently views market expansion as a high-risk venture with nothing to gain, but much to lose. Little wonder, then, that unnecessary regulatory barriers are reducing natural gas consumption by as much as 1 trillion cubic feet per year.

While there may not be an overall nationwide shortage of pipeline capacity, and though many existing pipelines are not operating at maximum throughput levels -- at least during the off-peak periods -- existing regulatory constraints detract from the attractiveness of natural gas in markets which could expand the utilization of gas. Inordinate delays in pipeline construction prevent natural gas from reaching new markets in a timely manner, and regulation of transportation and sales rates dampens incentives for pipelines to develop new markets for

existing capacity. Many of the new industrial and utility sources, that would prefer to use natural gas, elect instead to use other fuels that do not involve the delays and inherent uncertainties of the regulatory process which must be hurdled before the desired natural gas service may be commenced. Once these facilities begin to use other fuels, the ability of natural gas to compete for their supply requirements, including subsequent expansions, is significantly inhibited.

The NES Act seeks to alleviate the burdens, imposed by regulation on the industry's ability to expand into new markets in competition with other fuels, by proposing new, expedited options for pipeline construction and by replacing the edicts of regulators with the preferred negotiations of the commercial world. The Act also would encourage pipelines and their shippers and customers to make their own commercial arrangements, while providing a "safety net" for those unable to reach agreements and an opportunity for even a traditional pipeline to remove its rates in a competitive market from the Federal Energy Regulatory Commission's (FERC) regulatory jurisdiction, provided it abides by certain conditions. In addition, the proposed legislation would consolidate and streamline National Environmental Policy Act (NEPA) review responsibility. All of these proposals are designed to provide incentives for companies to rely on market-determined practices in the timely expansion and efficient utilization of their facilities. They are also intended to

streamline and improve the overall efficiency of the construction authorization process, while protecting and promoting the interests of consumers, rather than those of competitors.

Mr. Chairman, we believe that in order to maximize the effects of these new market-based options, a fundamental structural change in the regulatory oversight of the industry is needed. Since the NES Act proposes to give those who would construct and operate pipelines, and transport and sell natural gas through those pipelines, the opportunity to do so on the basis of commercial agreement rather than regulatory fiat, pipelines desiring to operate under this system would do so at their own risk. The marketplace and the investment community would tell them if that risk was justified. The role of the regulators would be to protect potential customers and consumers from possible market failures, not to second-guess commercial and investment decisions or protect the business interests of other market participants from competition. This reform would eliminate the requirement for virtually every decision made between a pipeline and its customers or shippers, as well as the investment or lending decisions of its financiers, to be established or approved by the regulators.

Accordingly, as a procedural counterpart to these substantive recommendations, the NES Act also would transform FERC into a single-headed executive administration within DOE.

This proposal, which was developed independent of the National Energy Strategy by the Vice President's Council on Competitiveness, is consistent with, and in fact complements, the Administration's major new initiatives to reform the current statutory and regulatory morass which, through delays, market distortions and uncertainties, is a primary obstacle to the increased use of natural gas. Indeed, once these statutory inhibitions to competition are removed, the necessity for protracted multi-party adjudicative hearings will be significantly reduced. The natural progression from wellhead deregulation of producers to an emphasis upon competitive, rather than regulatory, forces in the remainder of the natural gas industry suggest that a simplification of the regulatory structure will enhance, rather than hinder, the implementation of these new initiatives.

Since the proposed regulatory reforms would encourage prompt and decisive action, a structure such as the proposed single-headed Natural Gas and Electricity Administration (NGEA) is more consistent with that approach than the procedural complexities which are abundant in FERC. Multi-headed independent agencies which are prohibited from discussing ongoing proceedings with either Congress or the Executive Branch, or from debating and deciding those issues other than in a formal public setting, cannot be expected to act as responsively or expeditiously as an administrator who is subject to congressional oversight and

Executive Branch coordination. Furthermore, the existing procedural deficiencies of FERC, where policy is frequently established at the staff level in complex adjudicative hearings determining the fate of an individual company (rather than the industry on a generic basis) and then appealed upward to the Commissioners, could be substantially remedied by the proposed creation of NGEA. In NGEA, policy would be formulated on a generic basis by Executive Branch officers and then implemented in individual proceedings, subject to the facts as independently determined by an administrative law judge.

Mr. Chairman, if all of the NES recommendations, including Title II of the NES Act, are implemented, they will have the following benefits:

- (1) Consumption of natural gas is projected to increase by about 1 trillion cubic feet a year after 1995, or about 5% of current consumption.
- (2) Natural gas is projected to displace an additional 400,000 barrels a day of oil after 1995, mainly in the electric generation and industrial sectors.
- (3) Residential consumers are projected to save about \$140 million in 2000 and about \$1 billion in 2010.

- (4) Revenue for domestic producers is projected to increase by about \$8 billion in 2000 and \$7 billion in 2010.
- (5) Transportation revenue is projected to increase by about \$2 billion dollars.
- (6) Environment benefits will also result. In the year 2000, there is projected to be an annual decrease of 670,000 tons of SOx emissions, 200,000 tons of NOx emissions, and 11 million metric tons of CO2 emissions.

II. Title II of the NES Act

A. Overview

Mr. Chairman, I would now like to turn to the specific provisions of Title II of the National Energy Strategy Act. Both S. 341 and the proposed NES Act proceed from the assumption that it is time to take a fresh, bold look at the natural gas industry, its legislative and regulatory structure, and its markets. If the objective is to increase significantly the economically efficient use of natural gas in the Nation, the current system is grossly unsatisfactory.

We firmly believe that all sectors of the industry will benefit from increased opportunities to engage in more competitive, market-determined practices. Our goal should be to increase the efficiency of the overall market for natural gas to

the benefit of all -- producers, transporters, distributors and, most importantly, consumers. The Administration is determined to avoid approaches which seek to benefit one segment of the industry at the expense of another.

B. Pipeline Certificate Reform

Mr. Chairman, as you and the other committee members know, pipelines differ greatly in their configuration, utilization and markets served. In light of these variations, and recognizing that there is not necessarily one single, all-encompassing solution to pipeline certification reform, the NES Act offers several alternatives for pipelines to consider in the construction and expansion of facilities. A company will be free to select the option it finds most advantageous for the specific situation. A company's decision will depend on its analysis of its particular circumstances and the relative benefits afforded by each option. For example, it may prefer opportunities for arms-length negotiation with its customers, or it may opt instead for the familiar assurance of a predetermined rate of return on the new facilities. Constructing facilities with a certificate, which will provide the rights of Federal eminent domain and preemption of state laws, while remaining subject to NEPA review, are other potential tradeoffs that a pipeline will be free to consider. Included in this new service "menu" are the following options:

1. Amendment to Section 311 of the Natural Gas Policy Act of 1978

Section 203 of the NES Act is consistent with Section 10002 of S. 341 in that both provisions would provide two similar revisions to Section 311 of the Natural Gas Policy Act of 1978 ("NGPA"). First, under Section 203, parties for whom transportation may be performed "on behalf of" would be expanded to include not only interstate and intrastate pipelines and local distribution companies, but also "any other person." By allowing "any person" to resort to section 311, this change would allow producers, marketers and end-users to become parties on whose behalf such transportation is performed. This amendment would remove any cloud that has been cast over the scope of Section 311 service by the recent AGD v. FERC (Hudson) decision of the D.C. Circuit Court of Appeals.

A second proposed change is to make explicit what has been accepted as implicit -- the authority to construct facilities for transportation under Section 311 without obtaining FERC certification. The Commission's existing rules have allowed for this, provided FERC is notified prior to the commencement of construction. Since, under the NES Act, FERC's approval is not required, no notification to FERC is required. Instead, the NES Act would require notification of affected state agencies 30 days prior to the commencement of construction, so that local distribution companies and other interested parties would be apprised of new service being offered.

Because FERC is not issuing a certificate, there is no "major federal action" present to trigger NEPA obligations. State and other federal environmental laws would not be affected. Further, since the applicant would not be required to obtain a certificate, eminent domain rights would not attach, but state regulation of service terms for transportation through these facilities would be preempted.

2. Optional Certificate Procedures

Section 204 of the NES Act would allow applicants willing to construct, and customers willing to enter into transportation or sales agreements at negotiated rates, to do so with a minimum of government intrusion. Specifically, applicants seeking to construct, extend or acquire facilities under the new section 7(i) of the NGA would receive a certificate without a hearing and without requiring further proof that the public convenience and necessity would be served by the facilities, thus short-circuiting a process synonymous with delay and uncertainty. A section 7(i) applicant could not be challenged by a potential competitor on the basis that the certificate was exclusive or prejudicial to another application. Conversely, the holder of a section 7(i) certificate would agree, as a certificate condition, not to contest the application of another entity seeking to compete by serving the same area. The facilities would be constructed and operated at the total risk of the applicant. The

costs of the new facility would not be subject to cost-of-service rate recovery and could not be included at any later date in a jurisdictional rate filing for these or other facilities unless the Commission affirmatively acted to remove that condition from the certificate.

Negotiated rates and charges which the pipeline and its shippers and customers agree upon would be deemed just and reasonable, and would not be considered to grant any undue preference or advantage or maintain any unreasonable difference in rates, charges, or service. Thus, the holder of a section 7(i) certificate would be in compliance with subsections 4(a) and 4(b) of the NGA. The requirements for filing all rate schedules with the Commission and for notice, suspension, hearing and Commission determination as to the justness and reasonableness of rates presently required under NGA subsections 4(c), (d), and (e) would not apply to transportation and sale of gas through facilities authorized under a section 7(i) certificate since those services would either be provided under commercially negotiated agreements or would be subject to section 7(j). Likewise, the services provided by a section 7(i) certificate holder would not be subjected to subsequent challenge and potential redetermination by the Commission under section 5(a) of the NGA.

The NES Act recognizes that, subsequent to the construction of a pipeline under sections 7(i) or 7(k), a shipper may desire to obtain transportation service on a pipeline, which does not offer published, just and reasonable rates, but not be able to negotiate an acceptable agreement with the pipeline. Protection of those parties may be a proper role for continuing regulatory oversight. If a person wishes to receive transportation service from a pipeline operating under a section 7(i) certificate, but cannot reach agreement with the pipeline after submitting a bona-fide offer, that person would be permitted to petition the Commission for transportation service on a basis that is asserted to be not unduly discriminatory. The standard to be applied in making the determination is not the traditional cost-based, just and reasonable rate. Instead, the Commission would consider market conditions and, to the extent relevant, the entire range of transportation rates and services provided by the pipeline in order to establish a rate for the transportation service to be provided to the petitioner, assuming capacity is available. Unless the Commission determines capacity is not available, the Commission will issue an order within 60 days directing the pipeline to commence service on the terms sought by the petitioner. However, if the pipeline responds by offering terms for the requested transportation which it asserts are not unduly discriminatory, service may still commence within 60 days, but on the pipeline's terms, subject to refund to the petitioned rate.

The burden of proof would be on the pipeline to demonstrate that its proposed rates or charges are not unduly discriminatory.

Significantly, a pipeline electing to construct or extend facilities under a section 7(i) certificate would be entitled to the right of federal eminent domain and the same rights of preemption from state regulation which section 7(c) presently provides. Because the Commission would issue a certificate, utilization of 7(i) option would be a "major federal action." Therefore, the requirements of NEPA must be met before construction may begin.

3. Non-Jurisdictional Option

Under section 205 of the Administration's proposed legislation, any person may elect to construct, extend, acquire or operate new pipeline facilities for the transportation or sale of natural gas without first obtaining a FERC certificate. This aspect of section 205 is similar to section 10001 of S. 341 which also would authorize the construction of interstate pipeline facilities without a certificate. The major difference is that S. 341 would require issuance of a certificate by FERC before transportation service may commence, a requirement which may well result in the imposition of unspecified terms and conditions upon the pipeline. While the NES Act would give the pipeline an option to operate outside the Commission's jurisdiction, S. 341 specifically applies section 5(a), and presumably section 4, rate

treatment to facilities constructed under this option. We believe that these aspects of S. 341 unnecessarily limit the operating flexibility of "at risk" pipelines, while not providing any clear benefit to consumers.

Since no federal action would be required prior to construction under section 205 of the NES Act or S. 341, the provisions of NEPA should not be triggered by construction under this option. Therefore, any environmental reviews would be conducted by state or other federal agencies in connection with the exercise of their permitting authorities, and not by FERC. Since no certificate has been issued, the right of federal eminent domain would not be available. Under section 205, state economic regulation, but not other types of state action, would be preempted.

Even though a person operating a nonjurisdictional facility under the new section 7(k) of the NGA proposed by the NES Act would not be a "natural-gas company" for purposes of the NGA, a limited degree of federal control would remain in place so as to protect the rights of customers and shippers. When adequate capacity exists, FERC would be authorized, under proposed section 7(j), to order that transportation service be provided at rates or charges that are not unduly discriminatory and, under proposed section 7(a), to order physical interconnection with the pipeline's facilities, if the interconnection would neither place

an undue burden on the pipeline nor impair its ability to render adequate service to its customers. In this respect, a non-jurisdictional facility would be treated identically to a facility operated by a holder of a 7(i) certificate. Otherwise, the person operating the facility would not be subject to FERC jurisdiction and would be authorized to negotiate agreements, without FERC approval, under commercial terms and conditions.

4. Traditional NGA Section 7(c)

If a pipeline finds that, given its objectives in constructing new facilities, none of the above options are suitable, it could elect to proceed under traditional section 7(c) certification procedures, which would remain essentially unchanged by the Administration's proposed legislation. Since section 10001 is entitled "optional procedures," it is presumed that S. 341 also retains the traditional section 7(c) certificate procedures if a pipeline elects to pursue that approach. While a pipeline following this course may be subjected to extensive hearings on competitive grounds and economic terms and conditions, assuming that a certificate is finally issued, the pipeline will know the circumstances under which it may commence service. Of course, the rate review provisions of sections 4 and 5 of the NGA may affect future service conditions.

In addition to these service options, Section 201 of the NES legislative proposal would amend NGA Section 7(a) to provide that

FERC may direct a pipeline to establish physical interconnection with other facilities, at the applicant's expense, in order to receive natural gas from other facilities for transportation on the pipeline. This modification to permit mandated interconnection for the receipt of gas into the pipeline is consistent with FERC's existing authority to direct physical connection by a pipeline with the facilities of local distribution companies for delivery of gas out of the pipeline. The only change to the existing provision would be to include pipelines operating under the nonjurisdictional provisions of the proposed section 7(k). A pipeline could not be compelled, however, to enlarge its facilities or establish physical connection if that would impair the pipeline's ability to render adequate service to its customers.

Section 202 of the NES Act would make FERC the sole agency required by NEPA to prepare a detailed environmental impact statement in connection with applications for pipeline certificates. FERC would still be required to consult with and consider comments of other federal agencies. Those agencies, however, would not be required to conduct their own environmental review, since their action would not be a "major Federal action." This proposal eliminates the costly delays associated with multiple and often duplicative environmental reviews by other agencies whose authorization is necessitated by the proposed pipeline construction. While section 10003 of S. 341 would also

make FERC the lead agency for NEPA purposes, it is unclear whether that provision is intended to eliminate the necessity for other federal agencies also to prepare environmental impact statements for the same project.

In addition, under section 202 of the NES Act, FERC could charge an applicant directly for the environmental documentation costs the Commission incurs that are associated with processing applications for permission to construct and operate natural gas pipeline facilities under the NGA and hydroelectric facilities under the Federal Power Act. These charges would not be applied against the Commission's fiscal year budget appropriation.

C. Sales and Transportation Rate Deregulation

The NES Act would also provide some deregulation options applicable to all natural gas companies, including Section 7(c) certificate holders. Specifically, upon a hearing at a natural gas company's request, the Commission would have a new statutory authority under section 205 to find, based upon a determination that the pipeline has shown a particular market that it serves is competitive, and that the pipeline's transportation or sales services are offered in that market on a "not unduly discriminatory" basis, that the pipeline's rates in that market are not subject to the Commission's jurisdiction. This new authority would be in addition to the Commission's existing authority to determine that market-based rates meet the just and

reasonable standard where sufficient competition exists to protect consumers from market power abuses. Moreover, section 7(c) certificate holders may elect to convert to this market-determined approach of Section 7(k) for its entire system or for any sale or service which it provides by obtaining abandonment authority under Section 7(b) of the NGA and agreeing to the conditions required by Section 7(k). Obviously, this approach would require close coordination by the pipeline with its existing customers.

The need for reform of rate regulation on existing pipelines is demonstrated by the fact, mentioned earlier, that despite plentiful supplies and environmental benefits, less natural gas is being consumed today than 20 years ago. Thus increasing the efficiency of the existing system by reducing the scope of regulation on existing pipelines is an important complement to reducing the barriers to construction of new pipelines. Although FERC has taken important steps in this direction, a clear statutory mandate for deregulation of sales and transportation rates in competitive markets is needed.

D. Import and Export Deregulation

Section 211 of Title II of the NES Act proposes to remove the Department of Energy from the process of regulating natural

gas imports and exports. As with other proposed reforms, this will eliminate a needless layer of regulatory involvement, but will not disturb FERC's ability to inquire into the billing of natural gas imports acquired for system supply, or to regulate the construction of facilities associated with natural gas imports or exports.

E. FERC Restructuring

Mr. Chairman, as I mentioned earlier, the Administration believes the restructuring of FERC into a single-headed Administration in the Department of Energy would provide more effective coordination and implementation of energy policy, as well as facilitate expeditious decisionmaking related to the proposed natural gas reforms and other energy matters currently subject to the Commission's jurisdiction. This restructuring is a practical way of making possible meaningful and market-oriented reform of energy regulation. It sets the stage for future competition-enhancing reform, while retaining important features of the existing regulatory scheme.

Federal policy for natural gas and electricity can be best established and implemented if both are the responsibility of the Executive Branch, subject to appropriate congressional mandate and oversight, rather than by an independent agency with all of its restrictions upon policy discussions with the Executive Branch, and inhibitions upon congressional oversight and review

of policy determinations that are presently pending. Energy policy should be developed within the context of considering the full range of governmental and national interests in all relevant areas. While the Department of Energy also is charged with developing policy for natural gas and electric power, it has limited tools with which to implement its policy recommendations. In reality, policy gets made from the "ground level up" in individual and adjudicated FERC cases rather than from the "top down" with Executive Branch accountability. Under the current system of developing policy, however, neither the Executive Branch nor Congress can effectively discuss policy issues which the Commission is in the process of developing.

Under the current FERC structure, once policy has been established, it must be implemented through individual proceedings or settlements. However, under the concept of "separation of functions" as practiced by FERC, the ability of the policymakers to communicate their objectives in the implementation of that policy with that portion of the FERC staff responsible for presenting the staff position in those proceedings is extremely limited. This may result in positions being taken by FERC staff that are inconsistent with the views of the Commission, proceedings adjudicated on faulty premises, and decisions that do not reflect the policy directives desired by those responsible for the policy.

Moreover, as a multi-headed agency, FERC decisions cannot be made after due consideration by a single responsible executive; instead, they require concurrence by a majority of the Commissioners. Since the Government in the Sunshine Act requires that all meetings of more than two Commissioners be subject to notice and open to the public, timely action and a free and full exchange of views is unnecessarily inhibited. The requirement to obtain the votes of three Commissioners prior to the issuance of any order frequently results in delays and the necessity to achieve compromises which may undermine policy objectives.

Under subtitle C of the Administration's proposal, FERC would become an executive administration within DOE. This new Natural Gas and Electricity Administration would be headed by an Administrator, who would report to the Secretary and participate in key policy decisions made through DOE's existing policy-making framework. However, the ultimate responsibility for that policy would reside in the Secretary, subject to the guidance of the President and oversight by Congress.

In order to assure that the adjudication process would remain free of political pressure, individual proceedings requiring adjudicative hearings would be conducted by administrative law judges ("ALJs") within DOE. ALJ decisions would be subject to review by the Administrator, as the delegate of the Secretary. The Administrator would be delegated

responsibility for overseeing the proper implementation of policy, as well as for the prompt processing of all applications filed with the agency, including the assignment of matters to ALJs for hearings, where appropriate, and for assuring that the staff of the Administration is seeking to properly implement policy directives of the Secretary.

Procedural rights of all parties, including the right to judicial review, would not be affected by these reporting changes. However, if the provisions of Subtitle A of Title II are adopted, it may be anticipated that hearings required to be held would be far less complex and time-consuming.

III. CONCLUSION

Competition and reliance on market forces generally ensure that consumers will be provided cost effective, diverse, responsive services. Producers likewise will have alternative markets and incentives to provide services that consumers demand. Some interstate pipelines and local distribution companies do not operate in competitive markets. For those, some regulation of their services and prices is necessary to protect consumers and shippers from abuses that could result from the exercise of market power. Regulation is, however, a costly and inherently inflexible process; its scope should be limited to those markets where competition is clearly inadequate. The goal of regulation where it has been determined that significant market power exists

should be to simulate the incentives to efficiency and innovation that competitive markets provide.

The Administration's regulatory reform recommendations recognize these principles. Promoting rigid certification and rate regulation policies such as those found in the NGA thwarts competition and enhances market power of existing companies. The Administration's proposals encourage more open entry to serve customers and promote competition. Additionally, the Administration believes that domestic wellhead markets, found in the Wellhead Decontrol Act of 1989 to be competitive, will ensure that imports of natural gas cannot exercise undue market control. Similarly, the Administration's proposal to deregulate transportation and sales rates when there is no market power will relieve consumers and pipelines of unnecessary costs and allow pipelines to provide more flexible services.

Existing certification requirements often pose unnecessary barriers to potential natural gas suppliers who seek access to new and existing markets. A streamlining of the pipeline certification process through the creation of new, less government-intrusive and more market-oriented options for pipeline construction will provide incentives for more efficient and timely pipeline construction, increased competition, and a greater availability of natural gas service. In addition, the restructuring of FERC into a single-member administration within

the Department of Energy will make possible a long overdue simplification of the regulatory process and contribute to a more effective and coordinated implementation of energy policy.

Mr. Chairman, natural gas is making a major contribution to the Nation's long-term energy security. Because it is a clean and domestically plentiful fuel that can readily displace oil, natural gas could make an even larger contribution to the Nation's energy future. The reforms proposed in title II of the Administration's NES legislation are thus critical objectives in assuring that natural gas reaches its full market potential and in achieving a more coherent national energy policy. We look forward to working with this Committee on S. 341 and on our proposed legislation, and greatly appreciate your leadership in accomplishing this vital national goal.

The CHAIRMAN. Thank you very much, Mr. Wakefield.
Mr. Scherman.

**STATEMENT OF WILLIAM S. SCHERMAN, GENERAL COUNSEL,
FEDERAL ENERGY REGULATORY COMMISSION, ACCOMPANIED
BY KEVIN P. MADDEN, OFFICE OF PIPELINE AND PRODUCER
REGULATION**

Mr. SCHERMAN. Thank you. Mr. Chairman, and members of the committee, I am Bill Scherman. I am the General Counsel of the FERC. Accompanying me this morning is Kevin Madden, who is the Director of the Commission's Office of Pipeline and Producer Regulation.

We appear here today as staff witnesses and do not speak on behalf of the Commission. We appreciate this opportunity to discuss title X of S. 341, the amendments that Senator Bingaman proposed last week to that bill, as well as the National Energy Strategy Act. As you noted in your opening statement, these bills all seek in varying degrees to reform the regulatory structure of the natural gas industry.

Mr. Chairman, in our prepared remarks we described the proposed reforms in great detail and how they would affect the Commission's regulation of the gas industry. We also outlined with as great specificity as we could, certain aspects of the bill that may warrant further clarification or attention. We will accept your invitation on the NES Act, which was just recently introduced, to provide further specific comments on that bill as well.

What I would like to do briefly is give the committee a brief overview of some of the recent Commission activities in the areas related to the various legislative proposals.

It comes as no surprise to the committee to hear that in the last 5 years, the Commission has moved toward greater reliance on market forces in its regulation of the gas industry. We have spent a great deal of time and effort on trying to streamline the regulatory process. We have taken the view that where markets are found to be competitive, the Commission seeks to allow them to operate to the greatest extent possible without unwarranted Government intervention.

Where competition is not found to exist, we seek to use our regulatory authority in a flexible manner to simulate competitive outcomes. We seek to implement this market-oriented regulatory philosophy in everything we do, whether in promoting efficient natural gas pipeline rate designs, for which we developed a new policy in May 1989, or in seeking to adopt comparability of pipeline services, a subject that is currently being discussed in a generic Commission proceeding.

At the same time, we recognized that as competition in the gas industry intensified, particularly at the wellhead, that the Commission needed to allow companies greater flexibility to respond to market opportunities on a timely basis. Nowhere has this concern of Chairman Allday been more apparent than in the review process for new pipeline construction.

We have, therefore, spent at his urging a great deal of time and effort trying to streamline the certificate review process. We have continually worked towards reducing certificate processing time.

And I would like to briefly outline how we think some of those improvements have already begun to bring benefits. Since this past August, the Commission has approved over 1,260 miles of new pipeline capacity, with a combined daily capacity of nearly 2 billion cubic feet. This is the equivalent of roughly 320,000 barrels of oil a day. The cost of constructing these facilities will exceed \$1.5 billion.

We have also, in this time frame, issued 11 preliminary determinations. Preliminary determinations are orders that give an applicant the Commission's preliminary view on the non-environmental aspects of their proposal. These 11 preliminary determinations represent an additional 2,400 miles of additional pipeline capacity, with a combined daily gas capacity of 5.2 billion cubic feet a day. These facilities will cost another \$2.5 billion to construct.

To try to put this all into some kind of context, since October 1, 1988, the Commission has issued 122 construction certificates with a combined capacity of 12.6 billion cubic feet a day or the equivalent of 2.3 million barrels of oil. That is since October 1, 1988.

These certificates authorized the construction of 7,300 miles of pipeline, representing some \$7.25 billion in new investments. In addition, since section 311 construction authorization was adopted, the Commission has been notified that at least an additional 1,700 miles of pipeline and associated facilities representing nearly \$2 billion in additional investment have been constructed under the NGPA.

We are not resting upon this progress. We are trying to further streamline the certificate review process, and over the past year alone, we have implemented several new policies to speed up even further the certificate review process. We outlined those efforts in great detail in our prepared statement. We have done many things from trying to schedule expeditiously preliminary determinations on the nonenvironmental matters that come before the Commission. We shoot for a policy of bringing those before the Commission generally within 120 days of the filing of a complete application.

We are also trying to call parties in after an application is filed and completed. We are also trying a new procedure where we will call all the parties to a case together within 45 days after the certificate application has been filed and completed to discuss problems the proposal may raise.

We are also not spending our time only on the certificate process. We have also spent a great deal of time on trying to promote the efficient utilization of existing pipeline capacity. Our primary focus has been to design efficient rates, to ration peak capacity, and to maximize throughput.

The goal, simply put, is to increase the efficient utilization of existing facilities. The Commission will consider in this regard the unbundling of pipeline services, seasonal rates, interruptible rate design, capacity assignment, and comparability between pipeline services.

We have also recently announced, to further foster a competitive environment, that the Commission will be looking at on a generic basis not only comparability of pipeline services, but what future

pipeline service obligations should be. The service obligation and comparability of service are perhaps the most critical elements that still remain that prevent progress towards a truly market-based gas industry.

As with rate design, there is more than one approach to comparability. Experience has shown that customers do not all want the same types of services and service options. Flexibility is, in the Commission's judgment, once again the key to allow the market-place to operate as efficiently as possible.

While we have made significant progress in our view under our existing strategy framework, we are very pleased that the NES focuses on the continued pursuit of market-oriented policies for the gas industry. In many respects, the NES, as well as S. 341 here in the Senate and H.R. 779 in the House, all seek in some degree to build upon FERC's recent progress to foster a competitive gas industry.

The NES specifically recognizes that—and this is a direct quote—"the regulatory reform agenda in the NES builds upon the substantial progress made by FERC in recent years, and that FERC has made substantial progress in reforming an extraordinary complex regulatory structure."

We are also very pleased that the NES supports the full utilization of FERC authorities to ensure that pipelines with monopoly power over transportation services offer transportation and other services for third parties on a nondiscriminatory basis.

We are also again very encouraged that the administration supports the FERC efforts to promote efficient pricing of pipeline services. In particular, the NES recognizes the rate design policy statement that I mentioned earlier and continues to encourage the Commission's efforts to promote efficient pipeline rate design.

Finally, and again very importantly, the NES appropriately focuses on the environmental review process with new pipeline construction. Right now, the environmental review process associated with traditional certificates is the pacing element for all natural gas pipeline applications. While we remain very sensitive to fulfilling our environmental responsibilities, the delays built into the current statutory scheme do not produce significant and additional environmental benefits. Coordinating the efforts of numerous environmental resource agencies creates inordinate delays in the process.

We strongly urge the Congress and the administration to consider enhancing the Commission's authority to coordinate an efficient and comprehensive environmental review. We have submitted a proposal with our prepared testimony that was similar to the proposal that was submitted on the hydro side last week, Mr. Chairman, that we believe would further facilitate this process.

Turning now to several specifics of the legislation pending before us this morning, we have again put into the record some specific comments on negotiated rates, unopposed construction projects, contractual commitments as evidence of need, the codification of the Commission's existing law on replacement facilities, and changes in sections 4 and 5 of the Gas Act.

I would like to mention briefly three aspects of the bills that we are discussing this morning. Section 10001 of S. 341 would create

an additional option to the existing section 7 certificate approaches by creating a procedure whereby the marketplace and competition and not regulation would determine the need for new pipeline construction.

This section as currently drafted raises several questions that may warrant further committee attention. Perhaps the most important issue is that, while the Commission is authorized to condition this certificate issued under this section in order for it to be in the public interest, it is unclear what limits, if any, exist on this power for both environmental and nonenvironmental review purposes.

It would also be helpful to clarify from a procedural standpoint how this process is going to work. It would be helpful to know, for example, whether the pipeline company must file for a transportation certificate or whether the filing of the rate schedule automatically triggers the Commission's action with regard to the issuance of the certificate.

The proposed modifications to section 311 and in section 10002 of S. 314, as well as section 203 of the NES Act are helpful because they would remove the existing limitations providing for 311 transportation by interstate pipelines on behalf of only certain customers.

Under the section 10002 proposal, an interstate pipeline could transport natural gas on behalf of any other person. This would generally eliminate unwarranted distinctions between those parties permitted to avail themselves of this service option and would greatly enhance competition in the gas industry.

S. 341 and the NES Act all propose a menu of construction and service obligations that would certainly foster a competitive marketplace.

The ultimate policy question which you confront is which combination of these proposals, when taken together, represents the most efficient and feasible approach to potential new pipeline construction. As these bills move forward through the legislative process, it would be important to reconcile the various distinctions and similarities among these proposals.

Finally, Mr. Chairman, S. 341, Senator Bingaman's amendments, and the NES Act also propose several modifications to the manner in which the Commission complies with NEPA. This should facilitate the environmental review process associated with new pipeline construction. For example, recognition of the Commission as the lead agency for all projects under the Gas Act and Power Act will clarify this matter in cases in which the question might otherwise arise. This is especially important for cases where there is major pipeline construction being proposed that frequently involve the participation of a large number of Federal and State resource agencies.

In addition, S. 341 empowers the Commission to set reasonable time limits for other agencies to complete review of potential environmental impacts, and to consult with the Commission on those impacts. This will help the Commission meet its jurisdictional responsibilities in a timely and reasonable manner. However, coordination of this process now creates inordinate delays in the construction of new facilities.

We would like to point out that if any proposal that the Congress enacts is to truly expedite the review process, it should be made clear that the Commission can not only set time deadlines, but the Commission has the authority to enforce those time deadlines as well. For instances, if other agencies fail to meet the time limits that the Commission establishes, in our view the Commission should be authorized to take all appropriate steps to consider and issue a construction certificate under section 7.

Again, we recently proposed some language along those lines for you all to consider. We would urge the committee to consider an approach along these lines, for in our view, without this additional authority, the Commission may not be able to truly expedite the certificate review process.

Mr. Chairman, that concludes my remarks. We submit that in many ways all the legislative proposals currently pending seek to build upon the progress we have made to date in promoting competition in the gas industry. There is no doubt that many challenges lie ahead, and we stand ready to help and assist the committee in any way possible.

[The prepared statement of Mr. Scherman follows:]

PREPARED TESTIMONY OF
WILLIAM S. SCHERMAN
GENERAL COUNSEL, FEDERAL ENERGY REGULATORY COMMISSION
BEFORE THE COMMITTEE ON ENERGY AND NATURAL RESOURCES
OF THE UNITED STATES SENATE
MARCH 7, 1991

Mr. Chairman and Members of the Committee:

My name is Bill Scherman. I am General Counsel of the Federal Energy Regulatory Commission. Accompanying me today is Kevin P. Madden, Director of the Commission's Office of Pipeline and Producer Regulation. Mr. Madden and I appear as staff witnesses and do not speak on behalf of the Commission. We appreciate the opportunity to be here to discuss Title X of the National Energy Security Act of 1991 (S. 341), the amendments to this bill which were introduced by Senator Bingaman last week, and to the extent possible, the National Energy Strategy Act. These three bills, as well as the National Energy Strategy (NES), all seek, in varying degrees, to reform the regulatory structure of the natural gas industry.

In our testimony we will briefly describe the proposed reforms and how they would affect the Commission's regulation of the natural gas industry. We will also discuss certain aspects of the three bills that may warrant further attention and clarification. Since the National Energy Strategy Act was just introduced, we will provide supplemental testimony for the record with specific comments on that legislation.

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Before proceeding, it may be useful to give the Committee a brief overview of recent Commission activities in areas related to the NES and the proposed legislation.

In order to move toward greater reliance on market forces, the Commission has spent in recent years a great deal of time and effort streamlining the regulatory process. Where markets are found to be competitive, the Commission seeks to allow them to operate to the greatest extent possible. Where competition is not found to exist, we seek to use our regulatory authority in a flexible manner to simulate competitive conditions. We seek to implement this market-oriented regulatory philosophy in everything we do, whether in promoting efficient pipeline rate design -- for which we developed a new policy in May 1989 -- or in adopting comparability of services -- a subject that is currently being addressed in a generic Commission proceeding.

At the same time, we recognized that as competition in the gas industry intensified -- particularly at the wellhead -- the Commission needed to allow companies greater flexibility to respond to market opportunities on a timely basis. Nowhere has this concern been more apparent than in the review process for new pipeline construction. We have therefore spent a great deal of time and effort trying to streamline the certificate review process. We have continually worked toward reducing certificate processing time. Those efforts are beginning to pay off.

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The Commission has been aggressively processing pipeline construction applications. Since August, we have approved over 1,260 miles of new pipeline with a combined daily capacity of nearly two billion cubic feet -- the equivalent of over 320,000 barrels of oil a day. The cost of constructing these facilities will exceed 1.5 billion dollars. We have also issued 13 preliminary determinations (PDs) for new construction projects. The Commission has issued final orders on two of these projects. The remaining 11 PDs represent over 2,400 miles of new pipeline with a combined capacity of over 5.2 billion cubic feet a day. These facilities will cost 2.5 billion dollars to construct.

To put this into context, since October 1, 1988, the Commission has issued 122 construction certificates, with a total capacity of 12.6 billion cubic feet per day, or the equivalent of 2.3 million barrels of oil. These certificates authorize the construction of 7,330 miles of pipeline, representing some 7.25 billion dollars in new investments. In addition, since the section 311 regulations were adopted, at least 1,700 miles of pipeline and associated facilities, representing 1.8 billion dollars in new investment, have been constructed under section 311 of the Natural Gas Policy Act (NGPA).

We are not resting upon this progress. The Commission is trying to further streamline the certificate review process, and

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over the past year has implemented new policies to speed up even further certificate processing.

First, we have begun phasing our decisions on environmental and non-environmental matters, which we have already mentioned in the context of PDs. The Commission issues PDs on non-environmental issues so the applicant and parties have a sense of the Commission's views while the environmental review is being completed.

Another new approach to facilitate review is the type of information the Commission requires pipelines to provide concerning gas supply and markets before the Commission will approve a new construction project under NGA section 7. Recently, we have tried a new approach that recognizes changes in the industry as it becomes more market-oriented. A recent series of orders was based on a relaxed standard for market or supply information that an applicant must meet in order to receive a certificate. In return, the Commission has required that the pipeline bear a larger share of the risk of the project. This ensures that existing customers would not bear the expense of potentially imprudent construction projects.

The Commission has initiated other new procedures to move the process along. The staff will, in most instances, issue a notice advising the public that it intends to hold a technical

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conference within 45 days after a complete application is filed. The early technical conferences can be used as to air concerns, answer questions and, hopefully, resolve the issues raised by intervenors and staff. Additionally, our goal -- as a general matter -- is to schedule preliminary determinations on new construction projects for Commission consideration within 120 days of receipt of a complete application. We try to consider all new proposals in a time frame that will allow an applicant to meet its proposed in-service date if the project is approved.

We are also focusing our attention on generic certificate reforms to further improve the certification process. On August 2, 1990, the Commission issued a Notice of Proposed Rulemaking concerning pipeline construction. There, the Commission proposed sweeping changes in its construction regulations. The principal changes are:

1. Increasing dollar limits for self-implementing construction under the existing blanket certificate program;
2. Creating a new, expanded blanket certificate program that would allow the construction of mainline capacity costing up to \$50 million. Under the blanket program, pipelines would be allowed to commence construction

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(assuming no protests) after a notice period of 45 or 90 days, depending on the cost of the facilities;

3. Reformulating the Commission's environmental filing requirements so that applicants will know up front what environmental information is needed to process their application; and
4. Codifying optional certificate practices as they have evolved since 1985.

Comments have been filed on the proposed rule by every segment of the industry. We are reviewing those comments and working on a final rule that we hope will be before the Commission for consideration this spring. This will result in a streamlined procedure for pipeline construction projects.

Although pipeline construction has been a pressing concern, other issues have also taken a lot of Commission attention. Since May 1989, we have spent considerable resources promoting efficient pipeline rate designs. The primary focus is to design pipeline rates to ration peak capacity and maximize throughput. The goal is to increase the efficient use of existing pipeline capacity. In pursuing that goal we considered unbundling, seasonal rates, interruptible rate design, capacity assignment, and comparability.

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So far, 68 rate design policy statement cases have been completed or are in various stages of the hearing process. As of March 1991, 27 pipeline companies have filed settlements that have been approved by the Commission, after being evaluated under the standards of the rate design policy statement. Another nine companies have filed settlements that are pending Commission action. In general, the cases presented to the Commission represent a wide variety of results. But flexibility has been the key, as parties in different cases have adopted different solutions based upon pipeline operations and customer needs to implement the Commission's rate design policy. Clearly, experience has shown that there is not one, but many solutions.

The Commission held a rate design conference on January 25 to get feedback from the industry and to determine what issues have come to the forefront in the last year. One of the most important questions was whether to continue on a case-by case approach, or consider a generic approach. As you would expect, there was a diversity of opinions. As a result of the conference, the Chairman has directed the staff to bring truly uncontested settlements before the Commission within 45 days after they are certified.

At this time, we believe the Commission intends to move ahead in implementing rate design policy initiatives on a

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case-by-case approach. The goal is to continue to make progress. Three policy statement rate cases have now been fully litigated -- Panhandle, Northwest, and United -- and they will be before the Commission in the near future. In many respects, these cases represent a referendum on how the Commission intends to implement efficient rate design on a system-wide basis.

To foster a long-term competitive environment, the Commission is also going to look at service obligations and comparability of service issues in a generic proceeding. Service obligations and comparability of service are perhaps the most critical elements preventing further progress towards a truly market-based gas industry. As with rate design, there is more than one approach to comparability. Experience has shown that customers do not all want the same service options. Flexibility is -- once again -- the key.

Several issues appear to be critical elements to any debate about comparability. Customers must have adequate access to storage and to transmission capacity on upstream pipelines, in production areas, and on mainlines. There must be reasonable and predictable allocation methods to apportion capacity among shippers. Terms and conditions of service, such as scheduling requirements and imbalance penalties, must not impose a greater burden on shippers than on purchasers. Capacity curtailment provisions should treat sales and transportation customers

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equally. And finally, there is unbundling of each of the transportation services embedded in sales service.

But comparability only addresses one part of the pipeline-LDC service relationship. We must also address what the pipeline's service obligation should be to its sales and former sales customers. The service obligation issue has been a concern of local distribution companies and interstate pipelines alike. The Commission intends to consider the service obligation and comparability of service issues together in a NOPR that should be considered in the next several months.

NATIONAL ENERGY STRATEGY

Before proceeding to discuss the specifics of S. 341 and Senator Bingaman's proposed amendments, I would like to briefly discuss the NES. The NES focuses on the continued pursuit of market-oriented policies for the natural gas industry. FERC has made substantial progress within its existing statutory framework in this regard in the last six years. In many respects the NES -- as well as S. 341 and H.R. 779 -- all seek to build upon FERC's recent progress to foster a competitive gas market. Indeed, the NES specifically recognizes that its "regulatory reform agenda builds on the substantial progress made by FERC in recent years" and that "FERC has made substantial progress in reforming an extraordinarily complex regulatory structure that

has evolved over the past half century for a multibillion-dollar industry." (NES, First Edition at p. 91.)

We also encouraged that "the Administration supports full utilization of FERC authorities to ensure that pipelines with monopoly power over transportation services offer transportation and other services for third parties on a nondiscriminatory basis." (NES, First Edition at p. 93.) As the NES recognizes, "FERC has succeeded in securing the commitment of most pipelines to provide nondiscriminatory transportation service" (NES, First Edition at p. 93.) There are, of course, issues that remain. The NES notes the importance of comparable transportation services to sales services. (NES, First Edition at p. 93.) As mentioned earlier, the Commission is actively pursuing the issue of comparability of service on a generic basis, and expanded this generic proceeding to encompass the broader concept of pipeline service obligations. The Commission has, of course, been examining the issue of comparability of service in individual proceedings, including its gas inventory charge and rate case proceedings, since 1987.

The NES further notes that the "Administration supports ... FERC efforts ... to promote efficient pricing of pipeline services." (NES, First Edition at p. 94.) In particular, the NES recognizes the Commission's 1989 Rate Design policy statement that encourages the incorporation of economically efficient rate

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design, including seasonal rates designed to ration scarce capacity and capacity brokering options. The NES also calls for reforming natural gas pricing, specifically "deregulating the price a pipeline charges for natural gas, if it offers comparable transportation and other services to all on a nondiscriminatory basis." (NES, First Edition p. 94.)

The Commission has been doing just that. It has approved market-based gas rates, having first found that pipeline customers have meaningful access to alternative suppliers to make the pipeline's transportation service comparable to its sales service.

Finally, and as stated previously, the NES appropriately focuses on facilitating the environmental review process associated with new pipeline construction. Specifically, the NES indicates that the "Administration supports legislation making FERC the sole agency responsible for preparing an EIS for natural gas pipeline construction ... and allowing FERC to charge the applicant directly for an EIS and other environmental documents prepared by a private-sector firm, without the reimbursement cost counting against FERC's budget appropriation." (NES, First Edition at p. 93.) Making FERC the sole agency responsible for preparing an EIS would have the beneficial result of resolving the overlapping jurisdiction problem that it currently experiences with other agencies. While we remain very sensitive

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to the Commission's fulfilling its environmental responsibilities, we recognize that there are delays built into the current statutory and budget structures. Coordinating the efforts of numerous environmental resource agencies, for example, creates inordinate delays in the timely construction of pipeline facilities. While we will focus more specifically on the NES proposals in our supplemental testimony, we strongly urge the Committee to consider the Administration's proposal contained in section 202 of the National Energy Strategy Act.

It is with all this recent background in mind that we will now turn to the proposed legislation.

THE BILLS IN BRIEF

The Optional Procedure for construction of new facilities (section 10001) contained in the National Energy Security Act (S. 341) provides an alternative to traditional NGA section 7(c) certification. Under this proposal, construction would occur without prior Commission approval, but a certificate authorizing transportation service would be issued by the Commission upon initiation of service. Section 10002 of S. 341 would also amend NGPA section 311 (1) to permit transportation by interstate pipelines on behalf of any other person, instead of just intrastate pipelines and local distribution companies as the current law provides, and (2) to expressly provide for

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construction of facilities. S. 341 also includes various substantive and procedural changes relating to rates and charges, rehearing applications, and environmental matters.

Senator Bingaman's amendments propose certain changes and additions to S. 341, as well as proposing a procedure whereby construction authorizations (section 10013) could be designated as Priority Natural Gas Facilities. This designation would ensure action on a certificate within 12 months after a Commission order announcing such designation. A project would be designated as a Priority Natural Gas Facility upon a showing that it would result in a reduction in dependence on imported oil, facilitate construction of electric generation, contribute to environmental objectives, or contribute to achievement of other national energy policy goals. Senator Bingaman would also provide that projects unopposed during a 60-day notice period be deemed approved.

Similarly, the National Energy Strategy proposes several options for building new natural gas pipelines that would shorten or eliminate the procedures for obtaining a certificate. The NES also seeks to streamline the environmental process, improve access to transportation services, deregulate sales, rates, and reform rate design.

OVERVIEW OF CONSTRUCTION CERTIFICATES

Under the traditional approach to pipeline certification pursuant to section 7(c) of the NGA, a company that wants to construct a pipeline must first file an application for authorization with the Commission. The Commission traditionally evaluates, among other things, whether (1) the applicant possesses an adequate supply of natural gas to meet demands, (2) there are sufficient customers in the territory to be served, (3) the facilities for which a certificate is sought are adequate, (4) the costs of the facilities are adequate and reasonable, (5) the anticipated fixed charges are reasonable, (6) the proposed rates are reasonable, and (7) any alternative projects are mutually exclusive. The Commission also evaluates the environmental effects of a proposed project. After the Commission evaluates the application, it determines whether and under what conditions a certificate of public convenience and necessity should issue, all of which is done prior to construction.

In Order No. 436, the Commission introduced the optional certificate procedure in order to promote competition among pipelines by easing market entry and exit restrictions caused by potentially lengthy regulatory proceedings. Optional certificate applications are required to meet certain substantive filing requirements, but applicants are not required to demonstrate

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markets or gas supply to the extent required for traditional construction certificate applications. Rather, the applicant must show that it is willing to bear the risk of underutilization of the proposed project. A pipeline is eligible for an optional certificate if it agrees to provide nondiscriminatory, open access transportation pursuant to a Part 284 blanket transportation certificate, and if the proposed rates for the service are designed so that costs of underutilization are not shifted to the pipeline's existing customers.

With the advent of open access transportation, the Commission has recognized that individual shippers must assume greater responsibility for ensuring their own sources of supply. More recently, where a pipeline has sought authorization to construct facilities under section 7 authorization without the traditional evidence of a firm market, the Commission has issued a certificate with a condition that places the pipeline at risk for the costs associated with its new facilities in the event all of the newly-constructed capacity is not subscribed under firm contracts at the time the pipeline files to include the costs in its rate base.

Optional Procedure

S. 341 would create an additional option to the existing section 7 approaches to certification by creating a procedure whereby the marketplace and competition, as opposed to

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regulation, would determine the need for new pipeline construction. Under this new Optional Procedure for construction (section 10001), pipeline companies could construct facilities to provide transportation services without first applying to the Commission and obtaining a certificate. A certificate authorizing transportation service, conditioned by the Commission to assure the public convenience and necessity, would issue upon actual initiation of transportation service. The company would be required to accept this certificate.

Before commencing transportation service, the company would be required to file a rate schedule, establish rates on a stand-alone and incremental basis, and would be required to keep a separate system of books, accounts, and records for such facilities. The costs incurred for construction, operation, and maintenance of those facilities may not be allocated to any other service rendered by the company for ten years.

This proposal raises several questions that may warrant further Committee attention. While the Commission is authorized under the proposal to condition the certificate issued under this section in order for it to be in the public convenience and necessity, it is unclear what limits, if any, exist on this power. For instance, is the conditioning authority intended to be as broad as the conditioning authority under NGA section 7? If not, how is it different? Is it intended to cover

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environmental terms and conditions? Is it intended to cover rate conditions? In addition, it may be helpful to clarify from a procedural standpoint how this process is to work. For example, it should be clarified whether the pipeline company must file for a transportation certificate or whether the filing of the rate schedule automatically triggers Commission action with regard to the issuance of the certificate. Also, the question arises whether facilities constructed under this section may be converted to a regular section 7 certificate. If so, what terms and conditions could the Commission apply? Finally, would FERC be required to prepare an environmental document as a prerequisite to the operating certificate?

Rates

As to facilities constructed under section 10001 of S. 341, rates and charges would be those agreed upon between the natural gas company and the person contracting for transportation service utilizing such facility. That person could be the natural gas company itself. If, after conducting a proceeding under section 5 of the Natural Gas Act, ~~the~~ the Commission concluded that such rate is unjust, unreasonable, unduly discriminatory or preferential, the Commission would determine the just and reasonable rate and fix the same by order. S. 341 provides for such section 5 review on the Commission's own motion, or upon a complaint by any person.

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This provision which allows for negotiated, contractual rates, generally comports with the Commission's market-oriented goals. While conceptually, negotiated rates would be kept within a zone of reasonableness by market forces, there may be instances where prevailing market conditions prior to construction will not serve to ensure a fair rate. The problem arises where an interstate pipeline is a customer's only source of service. Under such circumstances, the pipeline could demand any price for service because the customer may not have sufficient access to alternatives to possess actual bargaining power. Thus, the lack of preconstruction competitive conditions could render a supposedly "negotiated" rate unjust and unreasonable. A potential problem also arises if an interstate pipeline and its affiliate, an LDC, negotiate an unusually high rate for service. In instance, the state commission would be required to pass this rate through to the local consumer. Similarly, a pipeline might agree to a very low rate for its market affiliate or its affiliate's customers, thus giving its affiliates an unfair advantage.

Under S. 341, such a non-competitive "negotiated" rate could be corrected through the initiation of a section 5 proceeding. However, S. 341 requires a determination that a reasonable basis exists to conclude that such a rate may be unjust or unreasonable as a prerequisite to initiation of a section 5 proceeding. It should be kept in mind that to the extent this provision is

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designed to check potential monopoly abuses, under section 5 the burden of proof to show that a rate is unjust is on the Commission, as opposed to section 4 rate proceedings where the burden is on the applicant.

One final question involves the interpretation of the provision which includes the natural gas company as a person which can enter into a negotiated rate agreement. It is unclear how a company negotiates with itself. Put another way, how can the market forces contemplated by this provision discipline the company's actions? Also, does this provision mean that a pipeline could "agree" to pay itself a "negotiated" rate to transport its system supply gas? Further clarification on these issues would assist the Commission and public in implementing this section.

Priority Projects under Amended S. 341

Senator Bingaman's Amendments to S. 341 would also add a procedure to section 7 of the NGA allowing for designation of a proposed facility as a Priority Facility (section 10013). Under this proposed procedure, an applicant for a certificate would request designation of such proposed facility as a Priority Natural Gas Facility in its application. The Commission would provide public notice of the request and allow an opportunity for the filing of applications that may be competitive with or

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mutually exclusive of the noticed project. Thereafter, the Chairman, in consultation with the Secretary of Energy, may designate a proposed facility as a Priority Facility for purposes of instituting a procedure to limit the duration of administrative and judicial procedures related to such actions.

The Commission must designate a proposed facility as a Priority Facility if the applicant makes a prima facie showing that the natural gas to be delivered by the facility would (1) reduce dependence on imported oil, (2) facilitate the construction of needed electric generating capacity, (3) contribute to the achievement of environmental objectives, or (4) contribute to the achievement of other defined national energy policy goals. A decision to designate or not to designate a proposed facility as a Priority Facility is not subject to judicial review. Likewise, denial of Priority Facility designation would not constitute rejection of the application.

Once a proposed project is designated as a Priority Facility, each Federal agency required by law to issue a certificate, right-of-way, permit, lease, or other authorization for the construction and operation of such a facility must issue a final decision or take such action at the earliest practicable date, but in no case later than 12 months after the date of the designation order. This requirement does not dictate that agency action on such projects should be favorable or unfavorable and

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does not affect the Commission's responsibility to comply with NEPA.

Several questions are raised by the proposed amendment. First, as before, the fact that the proposed authorization does not affect the Commission's responsibility to comply with NEPA may be problematic in terms of meeting the deadline established for Priority Facilities, especially in the case of large, complex projects. Another matter that may warrant further attention relates to the requirement that each Federal agency shall act within twelve months of the designation order. As with environmental matters, it would be advantageous in this case to designate explicitly the Commission as lead agency for purposes of achieving that deadline. It should also be clarified whether the proposed 12-month deadline applies to the Commission's consideration of the certification. If so, other agencies may need to act sooner. If other Federal and state agencies fail to meet the time deadlines, is the Commission authorized to take all appropriate steps to consider and issue a certificate?

Unopposed Projects

The Bingaman Amendments to S. 341 (section 10009) also provide that, with regard to any certificate issued under section 7, once the application is filed, the certificate is deemed to be issued if no protest or objection is filed within 60 days. This

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provision would greatly enhance the Commission's processing of applications. The question arises, however, as to how the Commission fulfills its NEPA responsibilities if the certificate is deemed to be issued after 60 days. Could the Commission attach environmental conditions to such a certificate? If the section requires this, then any analyses required under the NGA and NEPA presumably would be conducted during this 60 day period. As a practical matter, this is a very short time in which to conduct such analyses, especially with respect to major new construction projects. It may be necessary to clarify how the Commission will comply with NEPA and the substantive environmental statutes (such as the National Historic Preservation Act and the Endangered Species Act) within the 60 day period.

The Bingaman Amendments would add a further wrinkle to this proposal in section 100u9(ii) by requiring the Commission (within 90 days of enactment) to institute a procedure for dealing expeditiously with protests that do not raise material issues of fact necessitating an evidentiary hearing. We understand this provision to confirm the Commission's existing authority to act without a formal hearing in instances where a protest does not raise material issues of fact that would require a hearing, and to direct the Commission to develop procedures to make more effective and expeditious use of that authority.

Conclusive Evidence of Need

The Bingaman Amendments propose in section 10011 to amend NGA section 7 to provide that contractual commitments for firm natural gas transportation service to be rendered utilizing the facilities proposed to be constructed or extended shall be conclusive evidence of the need for such proposed service and facilities and would be sufficient to dismiss any claim of mutual exclusivity by another applicant. This proposal has the potential to facilitate significantly the way in which the Commission has for many years evaluated traditional section 7(c) applications by in effect allowing the marketplace to make such determinations. As such, this is generally consistent with the approach that the Commission has been fostering in recent years towards a market-driven industry.

One question this proposal evokes, however, relates to the extent to which captive consumers would be protected in the event excess capacity is built or projects fail at some future point. To address this problem, the Commission currently imposes "at risk" conditions on certificates that are not supported by sufficient supply and/or market data. In this way, the applicant may go forward with construction but may not include construction costs in rate base unless it is shown that the costs are justified. However, if a certificate is issued based upon contractual commitments, even if it is for "firm natural gas

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service," it may be difficult to justify, on the basis of lack of prudence, denying inclusion of costs in rate base, even if the facilities are underutilized, since the issuance of the certificate would be based on a statutory finding of need. We would therefore suggest that if this type of proposal goes forward, it be made clear that the Commission can protect consumer interests against potential cost shifting through some mechanism like it uses today.

This proposal also states that contractual commitments for firm natural gas service shall be sufficient to dismiss any claim of mutual exclusivity by another applicant. This standard is meant to eliminate the need for a comparative hearing in cases where mutually exclusive certificate applications are pending, but it would not apply to optional certificates where the Commission has provided that the applicant must bear the financial risks of any project and the certificate shall be non-exclusive. As such, this too would further the Commission's drive towards increasing the market-driven orientation of its regulatory processes. In the Notice of Proposed Rulemaking on construction currently pending, we are examining the scope of the "mutually exclusive" standard and whether it can be narrowed in a manner that would be more compatible with the current state of the industry.

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While we commend this approach, the Committee may want to consider whether, in a traditional section 7 proceeding, it can cut-off completely a competitor's rights to a comparative hearing in all instances. The Ashbacker doctrine is grounded on an applicant's right to due process under the Constitution. And while we certainly believe that there are time limits that can be placed on these rights, total elimination of the right to a comparative hearing in all circumstances may subject this provision to attack under Ashbacker Radio Corp. v. F.C.C., 326 U.S. 327 (1945) and its progeny.

Replacement of Facilities

The Bingham Amendments to S. 341 also propose in section 10010 that repair or replacement of previously-certificated facilities would not require a certificate unless the repair or replacement would result in more or less delivery capacity, or in a reduction or abandonment of service. Facilities eligible under this proposal would be required to have "substantially equivalent" designed delivery capacity. This would essentially codify the Commission's long-standing approach to replacement facilities contained in section 2.55(b) of its regulations. We note, however, that this proposal relates only to NGA section 7 facilities, and not to NGPA section 311 facilities, or any other non-NGA facilities that may be authorized under currently proposed legislation. Also, this proposal does not address

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situations where replacement may occur on a route different from existing facilities or whether NEPA applies.

The Commission is currently considering generic changes to section 2.55(b) in the Notice of Proposed Rulemaking (NOPR) issued August 2, 1990 (55 Fed. Reg. 33027) for the purpose of streamlining the Commission's pipeline construction process. In the NOPR, the Commission addressed this specific issue and concluded that there is a potential concern relating to the environmental consequences flowing from the replacement of facilities, especially where they may be contaminated with toxic substances, such as PCBs, or which are located in areas that have become heavily populated since initial construction of the pipeline. To address this concern, the Commission took an interim step by requiring pipelines to provide the Commission with thirty days notice prior to replacement, while examining this issue on a long-term basis.

NGPA SECTION 311

Another significant change proposed by the bills is the modification of NGPA section 311. Section 311 currently authorizes in certain instances interstate pipelines to transport natural gas on behalf of intrastate pipelines and local distribution companies, and intrastate pipelines to transport on behalf of interstate pipelines and local distribution companies

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served by any interstate pipeline. Section 311 applies only to authorization for certain sales and transportation and does not explicitly authorize construction of such facilities. However, the Commission has interpreted section 311 as conferring authority to construct facilities, and our section 311 regulations currently provide for such construction. That interpretation has been upheld by the U.S. Court of Appeals for the District of Columbia Circuit.

The proposed modifications to section 311 in section 10002 of S. 341 and the NES are important because they would remove the existing limitations providing for transportation by interstate pipelines only on behalf of certain entities. Under proposed section 10002, an interstate pipeline could transport natural gas "on behalf of any other person." This would generally eliminate distinctions between those permitted to avail themselves of this service. Moreover, this should allow for greater competition in the gas industry and would facilitate the open access policy adopted by the Commission.

The proposed modifications to section 311 would specifically authorize construction of section 311 pipelines solely for transportation under that section. This would eliminate any possible uncertainty concerning the existence of such authorization. While such authority is inherent in existing law, as upheld by the Court in Associated Gas Distributors v. FERC,

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826 F.2d 1136 (D.C. Cir. 1987), specifically authorizing construction and operation would remove this question as an issue once and for all.

Although the proposed revisions to section 311 should further promote competition in the gas industry, several matters may merit further attention. First, self-implementing compliance with the environmental requirements of section 157.206(d) of the Commission's regulation is currently required for section 311 construction projects. Because S. 341 provides for Commission authorization of construction by rule or order, such Federal action would require continued compliance with NEPA. This would allow the Commission to fashion appropriate procedures to balance environmental concerns with the need to expedite pipeline construction. It should be noted that this requirement would not seem to apply to construction under the Optional Procedures contained in section 10001 of S. 341. This authorization allows construction to proceed without a certificate. As mentioned earlier, the Committee may wish to review and make explicit what-type of NEPA review should be required by the Commission under the Optional Procedures, especially when compared to the self-implementing environmental regulations now applicable to section 311 construction.

On the other hand, under the Optional Procedure, once construction is completed it is necessary to obtain a certificate

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authorizing transportation service. Under the proposal, the Commission may impose conditions upon this certificate as required by the public convenience and necessity. Section 311 projects do not require a certificate, thus similar conditions may not be imposed on a case-specific basis. However, as provided in existing section 311 and as maintained in the proposed amendments under S. 341, the Commission can, by rule or order, condition the self-implementing nature of section 311 construction for both environmental and non-environmental matters.

Third, section 311 transporters must charge their system rates until they justify including the costs associated with section 311 facilities in their next rate case. Under the Optional Procedure, the transporter could charge negotiated incremental initial rates. Further, section 311 rates may be reviewed and modified through section 4 rate proceedings. The rates charged under the Optional Procedure may only be reviewed and modified through section 5 proceedings. Additionally, neither of these provisions bestows the power of eminent domain.

Having a menu of construction and service options available certainly fosters a competitive market place. However, the ultimate policy question is which combination of these proposals, when taken together, represents the most efficient and feasible approach to potential new pipeline construction. As these bills

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move through the legislative process, it is important to reconcile the various distinctions and similarities among these potential authorizations.

ENVIRONMENTAL CONSIDERATIONS

S. 341 and the NES also propose several modifications to the manner in which the Commission complies with NEPA. This should facilitate the environmental review process associated with new pipeline construction. Recognition of the Commission as lead agency for all projects arising under the Natural Gas Act and the Federal Power Act, as proposed in section 10003 of S. 341, will clarify this matter in cases in which the question might otherwise arise as to which agency is the appropriate "lead agency." This is especially true for major pipeline construction projects that frequently involve the participation of a large number of Federal and state agencies with corresponding problems relating to coordination and cooperation. In this regard, it should also be clarified that the statement that the Commission shall be lead agency for NEPA purposes for projects under the NGA and FPA extends to construction authorized by S. 341 as well.

The additional authority in S. 341 empowering the Commission to set reasonable time limits for other agencies to complete reviews of potential environmental impacts and to consult with

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the Commission will enhance the Commission's ability to meet its responsibilities in a timely, reasoned fashion. As indicated above, coordination of the numerous environmental resource agencies often creates inordinate delays in the construction of pipeline facilities that are needed to provide much needed natural gas service to consumers. However, if this proposal is truly to expedite the review process, it should be made clear that the Commission can set and enforce the reasonable deadlines it establishes. For instance, if other agencies fail to meet the time limits, is FERC authorized to take all appropriate steps to consider and issue a construction certificate under section 7(c)? What, if any, are the limits on FERC's conditioning authority under such circumstances? The Commission recently proposed language to the Committee to address this issue for hydroelectric facilities. (See Statement of Cynthia A. Marlette Before the Committee on Energy and Natural Resources, United States Senate, February 26, 1991, Attachment A) *✓* We would urge the Committee to consider a similar approach for new pipeline construction under section 7. Without this additional authority, the Commission may not be able truly to expedite the certificate review process.

Finally, S. 341, in its original form and as proposed to be amended by the Bingaman Amendments, proposes to allow applicants to hire consultants or contractors, chosen by the Commission and paid for by the applicant, to prepare environmental documents.

✓ Retained in committee files. See S. Hrg. 102-5 (Pt. 2).

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This authorization would enhance the Commission's environmental review process.

The process of accumulating information and preparing these often lengthy documents is frequently the most time-consuming part of the environmental review process and is one area where greater assistance would be particularly beneficial. If this approach were utilized, the Commission would remain responsible for directing the contractor, independently evaluating the findings, and making an informed and final environmental determination.

S.341 and Senator Bingaman's Amendments differ in the following ways: S. 341 allows the applicant to hire a contractor or consultant "chosen by the Commission in its sole discretion" to prepare environmental documents, while Senator Bingaman's amendment permits the applicant to select a contractor from a list created by the Commission to prepare environmental documents. Presumably, Senator Bingaman's amendment gives the Commission the sole discretion to create the list of potential contractors. If so, either proposal would allow the Commission to fulfill its statutory responsibilities under NEPA. In addition, any such proposal should make clear that the Commission retains full authority over the scope, timing and preparation of all environmental documents. Finally, we would recommend a statement -- either in statutory or report language -- that

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monies spent under these provisions would not count against the Commission's budget authorizations.

Additionally, Senator Bingaman's amendment to section 10003 would require the institution of procedures for pre-application consultations with applicants regarding the environmental information required for Commission analysis. A related amendment requires that the Commission amend its rules governing ex parte communications to clarify that these prohibitions would not apply to communications between the Commission's environmental staff and the Federal agencies that are cooperating agencies for the purpose of compliance with section 2 and Title I of NEPA.

Pre-application consultation with the Commission by applicants is a useful tool to facilitate the environmental review process and should be encouraged as recognized by the proposed legislation. We would note that the Commission's regulations at section 380.3(b)(3) already require applicants to consult with appropriate Federal, regional, state, and local agencies during the planning stage of a proposed project. Likewise, consultation with cooperating agencies is a necessary part of many projects and is not deemed ex parte conduct in most instances. In addition, the ex parte rules do not apply to inter-agency communications during the pre-filing consultation process.

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The Bingaman Amendments to S. 341 also provide in section 10012 that in hearings for NGA section 7 certificates, the Commission may phase its consideration of issues and issue an initial order containing preliminary findings. The Amendments provide that the initial order shall be subject to rehearing and court review under NGA section 19 and that issuance of a certificate will be subject to a final order based upon the complete record of the hearing.

This amendment to the proposed legislation would codify partially current Commission practice whereby the Commission uses separate procedural tracks for the environmental and non-environmental issues associated with a certificate application such that preliminary consideration of economic and competitive issues are not delayed by pendency of the environmental review. This practice appears to shorten the time between the filing of an application and initiation of service. Thus, this proposal codifies existing Commission policy. This proposed revision also contemplates that the initial order would be subject to appellate review after its issuance, but prior to the time that the final decision is made as to whether to issue the certificate. Current practice is that appellate review is not taken until after agency rehearing on the actual issuance of the certificate is concluded. In the interest of judicial economy, we would suggest this practice be continued and that judicial review of preliminary

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determinations is unnecessary at an intermediate stage of certificate review process.

The Bingaman Amendments also seek in section 10014 to revise the jurisdictional provisions of the NGA such that the Commission shall not "infer any control or responsibility over nonjurisdictional activities for purposes of carrying out its environmental responsibilities" under the NGA or other Federal statutes. This amendment appears to limit the scope of the Commission's environmental review of the potential impacts of nonjurisdictional facilities that are constructed with, or in relation to, a jurisdictional project. The Commission's responsibilities to review the impact of related nonjurisdictional facilities is mandated by the decision of the Court of Appeals for the District of Columbia in Henry v. FPC, 513 F.2d 395 (D.C. Cir. 1975), and subsequent cases. It is unclear whether this provision is intended to overrule that case and its progeny. It would be helpful to clarify this important NEPA-related issue. If the intent of the proposed provision is to limit the scope of this holding, it would be helpful if the limits that are sought to be placed on the Commission's obligation to review were spelled out in greater detail.

NGA SECTION 4 RATES AND CHARGES

S. 341 proposes several changes regarding rates and charges under section 4 of the NGA. First, proposed section 10004 increases from 30 to 60 days the notice required to be given to the Commission and public of changes by natural-gas companies to any rate, charge, classification, or service, or in any rule, regulation, or contract relating thereto. The proposed legislation retains Commission authority, for good cause, to allow changes to take effect without prior notice. This proposal parallels the comparable section in the Federal Power Act for electric rates and would greatly assist the Commission in its initial review of rate filings, which often involve many complex issues. Because it is often difficult to complete this review within 30 days, additional time will greatly assist the Commission to resolve important rate issues at an earlier stage of the rate review process. We would urge the Congress to adopt this proposal.

The legislation also proposes changes relating to refunds. Existing statutory authority provides that where rate schedules are suspended, and increased rates or charges are made effective before the Commission completes its review, the Commission may order various actions, including refunds of increased rates or charges. The proposed legislation would delete the reference to increased rates or charges and simply require that "where changes

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in rates or charges" are made effective, the Commission may take whatever action is necessary. This alteration is significant for two principal reasons. First, it shifts the burden of proof from the Commission to the applicant on matters where there is not an increased rate or charge. This puts the burden of proof on the company in all cases to show why any change is warranted.

Second, the proposed legislation expands the Commission's remedial refund authority. Instead of limiting its power to order refunds of increases, the proposal provides authority to order refunds beyond the level of the increase or rate decrease.

This represents a major change in existing authority because it allows the Commission to require refunds below the preexisting rate where the preexisting rate has become unjust and unreasonable. It also clarifies that the Commission can order refunds of aspects of an unjustified rate change, even if the overall result of the rate change did not increase the revenues earned by the pipelines.

REHEARING PROCESS

Next, section 10006 of S. 341 would revise the current regulatory process by extending the time to act on rehearing applications from 30 to 60 days. The proposed legislation provides that the Commission may, for extraordinary cause, extend

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the period for rehearing an additional 60 days. The intent of this provision is to impose strict time limits on the resolution of rehearing applications. Given the magnitude of the issues raised in some rehearing applications, and the fact that simultaneous or concurrent consideration of issues in different cases is often necessary or desirable, we would urge the Committee to reconsider mandating stringent time limits on the rehearing process. Therefore, we would strongly urge that such limits not be adopted to limit the flexibility of the Commission in controlling its agenda. We have attached (Attachment B) a proposed revision to S. 341 that can fairly balance our concerns in this area with the Committee's desire to expedite the administrative process.

CHANGES TO APPELLATE PROCESS

S. 341 proposes to limit to 30 days (instead of 60) the time in which to file petitions for review of rehearing orders in appellate court, would require such petitions to state with specificity the basis for their claims, and would require that a copy of the petition be filed with the Chairman of the Commission. These changes would reduce the time in which appeals may be taken and require greater specificity in the notice of appeal. It would not eliminate final action by the Commission on the application for rehearing as a jurisdictional prerequisite to filing an appeal. These changes will not necessarily produce

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faster judicial review, because the courts will establish their own schedules.

CHANGES TO ANTITRUST LAWS

Although civil actions as such under the antitrust laws are outside the Commission's jurisdiction, S. 341 also proposes another important change. It provides that in any civil action the formation or operation of an independent producer cooperative shall not be deemed illegal per se, but only if the anticompetitive effects substantially outweigh the procompetitive effects. This would allow persons whose natural gas production does not exceed six million cubic feet per day to band together to bargain more effectively for the sale of natural gas. In general, this may provide small producers greater leverage to compete in the sales arena.

RULEMAKING PROCEDURES

S. 341 provides that rulemaking procedures may be used to establish rates and charges, issue certificates, or authorize abandonment of facilities and services. For the record, it should be noted that the courts have confirmed the Commission's authority to authorize abandonment and establish rates and charges by rulemaking. Recently, the Supreme Court of the United States upheld our generic abandonment authority in its decision

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on Order No. 451. Mobil Oil Exploration & Producing Southeast Inc. v. United Distribution Cos., 111 S.Ct. 615, 112 L.Ed. 2d 636 (1991). Several years ago, the U.S. Court of Appeals for the D.C. Circuit upheld our generic ratemaking authority in its decision on Order No. 380. Wisconsin Gas Co. v. FERC, 770 F.2d 1144 (D.C. Cir. 1985, cert. denied, 476 U.S. 114 (1986)). With respect to considering certificate applications, it is the Commission's well-established practice to process applications on the basis of a written record without a trial-type hearing if possible. This provision confirms that practice. The Commission would retain the authority under the Administrative Procedure Act to order a trial-type hearing in the event that there are disputed facts that cannot be resolved on the basis of a written record.

VEHICULAR NATURAL GAS

S. 341 also proposes provisions regarding Vehicular Natural Gas (VNG), which confirm that certain activities related to the sale and distribution of natural gas as a vehicular fuel will not cause entities that are currently exempt from NGA jurisdiction to forfeit such exemptions.

The proposed legislation gives rise to several potential problems. First, it sets forth a test which, for purposes of section (1)(c) of the NGA, attempts to establish the proper

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limits of jurisdiction. As does section (1)(c), the proposed amendment provides that certification from a State commission to the FERC that such State commission has regulatory jurisdiction over the rates, services and facilities of a person and is exercising such jurisdiction shall constitute conclusive evidence of such regulatory power. Unlike NGA section 1(c), however, S. 341 goes on to provide that such certification shall constitute conclusive evidence of regulatory power or jurisdiction even in cases where the State commission does not have jurisdiction by reason of State law, or is not exercising jurisdiction over the sale for resale or transportation of VNG. This would in effect define what constitutes State jurisdiction in two different ways for the same Act, which seems undesirable. It may also not be desirable to adopt an approach that would encourage a State commission to certify that it has jurisdiction when it knows that it does not under state authority.

Next, subsections (c)(1) and (c)(3) appear to be inconsistent. Subsection (c)(1) provides that in the case of a sale for resale, such sale for resale shall be subject to the exclusive jurisdiction of the State commission in the State in which physical delivery of the VNG occurs. Subsection (c)(3) provides that in the case of sale for resale of VNG, or the transportation of VNG, such sale or transportation shall be deemed to be subject to the exclusive jurisdiction of the State commission of the State in which such sale for resale or

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transportation occurs. These two provisions also seem partially redundant. Section (c)(1) gives jurisdiction over sales for resale of VNG by a section 7(f) company to the State commissions, and section (c)(3) then appears to give State commissions jurisdiction over both sales and transportation by a section 7(f) company. Thus, section (c)(3) seems to include section (c)(1).

Finally, the proposed bill does not exempt from Commission jurisdiction (1) a sale for resale by a local distribution company that is not also a Hinshaw pipeline and (2) sales for resale by an interstate pipeline through its own distribution facilities. It appears that Nebraska is the only state where an LDC is not subject to regulation by a State commission and is thus not eligible for the Hinshaw exemption.

CONCLUSION

In conclusion, Mr. Chairman, we respectively submit that in many ways, all the legislative proposals currently on the table seek to build upon the progress the Commission has made to promote competition in the gas industry and to streamline the regulatory process. This will help assure a plentiful supply of this clean, safe fuel at just and reasonable rates.

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That concludes our remarks. We appreciate the opportunity to appear before this Committee as you consider matters of great importance that affect all segments of the natural gas industry.

Section _____.

(a) Section 19(a) of the Natural Gas Act (15 U.S.C. 717r(a)) is amended by striking the fourth sentence and inserting the following in lieu thereof:

The Commission shall take final action upon the application for rehearing within ninety days after it is filed, unless the Commission (i) determines in an order giving reasons therefor that the interests of justice require deferring action on such application and (ii) specifies a date certain by which it will take final action. Unless the Commission takes final action on such application within ninety days after it is filed, or such later date as may be specified, the application for rehearing shall be deemed to have been denied.

History of Williams Pipe Line Company Proceeding

The Williams Pipe Line Company (Williams) proceeding began at the Interstate Commerce Commission (ICC) in 1972 when various shippers challenged the lawfulness of Williams' rates. The ICC found those rates to be just and reasonable. The shippers appealed to the United States Court of Appeals for the District of Columbia. In 1977, while the appeal was pending, Congress transferred regulatory authority over oil pipelines to the Federal Energy Regulatory Commission (the Commission). In 1978, at the Commission's request, the court remanded the case to the Commission for reconsideration. Farmers Union Central Exchange v. FERC, 584 F.2d 408 (D.C. Cir. 1978).

In 1982, the Commission issued Opinion No. 154. 21 FERC ¶ 21,260, reh'g denied, 22 FERC ¶ 61,086. The shippers and the United States Department of Justice appealed to the D.C. Circuit. In 1984, the court remanded most of Opinion No. 154. Farmers Union Central Exchange, Inc. v. FERC, 734 F.2d 1486 (D.C. Cir. 1984). In March 1985, the Commission approved a settlement with respect to Williams' rates. 30 FERC ¶ 61,262. In June, 1985, the Commission issued Opinion No. 154-B, which established a methodology for testing the reasonableness of oil pipeline rates in Oil pipeline rate proceedings. 31 FERC ¶ 61,377, reh'g denied in part, opinion modified in part, and clarified in part, 33 FERC ¶ 61,327 (1985). The D.C. Circuit granted the Commission's unopposed motion to dismiss the appeal of Opinion No. 154-B.

The CHAIRMAN. Thank you. Your testimony is very helpful to us. We think that these provisions with respect to natural gas are very important, and that they will promote the use of natural gas.

We also think that S. 341 is a bill that can pass and should pass. And in order to make it pass we want to deal with it reasonably quickly. As you have no doubt seen here in the committee, we are going with great priority on S. 341. We are holding wall-to-wall hearings between now and April. We hope to be in markup in April and hope to be on the floor this spring before the docket gets too crowded out there and before memories of the Gulf War are too dim.

Consequently, we want to avoid things that would gum up this process. And I must say, Mr. Wakefield, that the first thing that would gum up the process is dealing with the abolition of FERC and putting it over in DOE. This may be a good thing to talk about perhaps after S. 341 is over. It certainly is a good debate to spur us on to how we can make the process more workable and more expeditious.

But I think we cannot deal with that particular question in this particular legislation. And we do that not out of disrespect for DOE and its excellent staff, including you, for whom we have high regard, but simply the clock will not allow us to do that. And I am sure you understand what we mean.

Now, by the same token, certain things such as, Mr. Scherman, you mentioned on the environmental review that the Commission proposed in its testimony at the hydro hearing. That also would probably run us into some difficulty with the environmentalists on setting deadlines. We did that—I remember the energy mobilization board legislation of some years ago. That was central to that legislation. We got it passed in the Senate. I think it was also passed in the House and stopped in the Conference Committee. But that was one of the most controversial parts of it.

I believe we ought to be able to do that, but I can tell you it gives us a degree of grief and difficulty in passing expeditious legislation that I do not think we can consider that. And by the same token, the Appropriations Committee is very jealous of its provisions about who gets allocated the credit for and the payment of those services for the EIS. We think we have helped the situation on the payment for the EIS that will give you the relief there that you need.

Now, there are two principal provisions it seems to me. We will accept many of your written recommendations with respect to most of these other small provisions which have been helpful. But it seems to me there are two principal issues here—the section 311 and the noncertificate option.

With respect to section 311, Mr. Wakefield, you say that you want to make the building of pipelines at the total risk of the investor. Now, my concern is that it may be impossible to do that, because if the pipeline goes belly-up, then it will be at the risk of others—at the risk of customers. I mean, if you have a pipeline that is built without proper customer base and some of those customers go belly-up, then what happens to the other customers? It then becomes at their risk. Or if you have a pipeline who is having

difficulty, they might come to FERC for a bail-out. Is that of any concern to you?

Mr. WAKEFIELD. Well, first of all, Mr. Chairman, our section 311 proposal, that would not be a total risk facility in the sense that they would be a part of the facilities of the interstate pipeline. How FERC would subsequently treat them in a rate case and whether those costs were to be borne on the system would be determined in a later case. So I do not think those comments apply directly to the section 311 facilities.

The CHAIRMAN. Well, that is what I mean. FERC would in effect have to bail them out, would they not? Allocate the cost elsewhere?

Mr. WAKEFIELD. Whether bail-out is the right word or not, in subsequent FERC rate proceedings, FERC would take up the issue in the pipeline's jurisdictional rates. FERC would consider whether those 311 facilities were in fact used for its existing jurisdictional customers and to what extent those costs should be shared by existing jurisdictional customers. But this in effect is the practice that has gone on since the Natural Gas Policy Act was passed in 1978 and I do not foresee any changes in that area.

As to the nonjurisdictional total at risk facilities, it is the customers that are entering into contracts with the pipeline that will determine whether the pipeline is built and whether the pipeline can get financing to be built. We have got some pretty sharp-eyed investment bankers out there who look pretty carefully at that issue. If they are concerned about the financial stability of those customers, the money just will not be forthcoming.

The CHAIRMAN. Well, but will they not require some provision there that says if one of the customers goes belly up that the others will pay the cost?

Mr. WAKEFIELD. That would depend on the investment banker and what the terms of the financing are. It is possible that they would, but remember these are all customers who have signed up for that pipeline. These are not the traditional FERC jurisdictional customers. It may only be one customer. It may only be building a facility to a co-generation plant.

But I had a discussion on this very topic the other day with an investment banker who does a lot of this financing, and he said, let us say, I want to build a co-generation plant and I talk to a pipeline, and they are willing to build facilities to me to supply that plant. I start talking to him about how quickly they can move and they say, just as soon as we get all our certificates from FERC. I go ask a lawyer what that means, and I decide that maybe imported oil does not look so bad, because at least I can get that in the foreseeable future.

So I think when people look at these non-jurisdictional facilities, and as they get used to it, the risks will get sorted out. I think the important point here is who decides what those risks are? Is it the regulator, or is it the investment community and the pipeline who is putting up the money that makes the assessment of the risk?

The CHAIRMAN. Let me get Mr. Scherman to jump in here, and I take it you disagree with Mr. Wakefield. And if you do, tell me why?

Mr. SCHERMAN. Not that I disagree. I think his characterization of the current process is accurate right now when a facility is con-

structed under section 311. When that happens, it happens without a FERC certificate. When the pipeline seeks to include the costs of those facilities in its rate base, it comes in and must file for both an operational certificate at the FERC, as well as it comes in and seeks to include those in a section 4 rate case.

If the Commission in that section 4 rate case believes that there is not sufficient showing as to the market and need for the pipeline, it has recently begun to place the pipeline at risk for potential underutilization of those facilities. What we have done is generally said that if the pipeline is supported by 10-year, firm contracts, then that is fine.

If not, then in order to protect consumers against potential underutilization of those facilities, the pipeline would remain at risk, subject to showing that the pipeline is actually being used. The pipeline remains at risk and not the consumer for the underutilization of the capacity.

So I do not necessarily disagree. I think you need to consider—when you talk about the risk, you need to consider both the investment community, the risk on the pipeline as well as the consumer impact.

The CHAIRMAN. Well, how would this work under DOE's optional certificate and your nonjurisdictional options?

Mr. SCHERMAN. I think under DOE's options, and again, Mr. Chairman, we have not had a chance to really study them. But it appears that, under their noncertificate option, there would still be a similar process as to the facilities but there would not be under the nonjurisdictional option—that those would be outside the scope of the Commission's jurisdiction for both certificates and rates.

Mr. Madden, may want to—

Mr. MADDEN. Mr. Chairman, as to the 311 question, the traditional interstate pipelines charge their 284 rates, which are on file with the Commission, and those rates are just and reasonable. And as Mr. Scherman said, once they try to convert those 311 facilities to a 7(c) facility, they try to roll the costs into their rate base.

As to the optional proposal, it seems that there is no set 284 rate. Instead there is more of a negotiated rate that occurs there. So that is the distinction. Currently, the 311 construction and operation for interstate pipes are based upon the 284 rates for the most part.

The CHAIRMAN. Mr. Wakefield, what evidence do you have to support the assertion that natural gas markets are really as competitive as you say they are?

Mr. WAKEFIELD. Well, I am not sure they are truly competitive in every sense, Mr. Chairman. Certainly, many of the sales markets are competitive. Many of the transportation markets are not. In many areas there is only one pipeline that is available and I think certainly in those areas, there is a need for continuing regulatory oversight. I think that determination as to whether a market is workably competitive needs to be made on an individual basis and needs to be made by the regulators, perhaps with the antitrust division at Justice also doing a review.

The CHAIRMAN. Mr. Scherman, how do you determine the competitiveness of markets?

Mr. MADDEN. If I may, Mr. Chairman. I think you have to look at two factors initially. And those two factors are the sales function of the pipeline and the transportation function of the pipeline.

As to the sales function of the pipeline, you look at the market and services provided and whether or not the customers actually have choices. The Commission has done this in a number of gas inventory charge proceedings where they first look at whether or not there is supply behind the system for those customers and whether or not those customers have transportation which is equal to the transportation embedded in the sales function.

As you may know, the Commission has about 12 gas inventory charges before it, and it has approved approximately six gas inventory charges. In those particular cases it has found that the market was competitive and established a market-based rate.

As to the transportation function, however, the Commission has not really focused on that. Instead if we do an analogy, we have to look at it from an oil pipeline standpoint: are there other intermodal activities available for transportation customers. We do not think at this time for the most part, that there are. We are looking at it, but we have not focused that closely as we have on the sales function.

The CHAIRMAN. Thank you.

One final question. Mr. Wakefield, why should not an optional certificate or a nonjurisdictional pipeline be required to keep its rates for inspection? I mean, it seems to me someone who is denied access or is charged an unreasonable rate, cannot make their case, unless they get the rates.

Mr. WAKEFIELD. This is a very good question, Mr. Chairman. I think the answer is there is a tension on the one hand between the need for someone who wants to get service and is concerned that he is being unduly discriminated against have access to what other people are being charged, and on the other hand, the need for maintaining some confidentiality of commercial transactions.

I believe that under the current state of the law, the FERC has adequate authority to obtain the contracts of nonjurisdictional transactions. I would not suggest that contracts not be made available, but rather that this is perhaps something better left to regulation rather than legislation, so that the regulatory agency can go through procedures to obtain those contracts, make the knowledge that needs to be made available publicly made available, while at the same time protecting the confidentiality of commercial transactions.

That is the reason why we have written section 4(c), to require the filing of all contracts. We anticipate that if this proposal passed, that FERC would go through administrative procedures to make sure that those contracts were made available and to the extent some aspect of them needed to be kept confidential or perhaps only shown in effect in camera before an administrative law judge, that could be done.

The CHAIRMAN. Thank you very much. I will have some questions in writing.

Senator Wallop.

STATEMENT OF HON. MALCOLM WALLOP, U.S. SENATOR FROM WYOMING

Senator WALLOP. Thank you, Mr. Chairman. I will forebear my questions until after others have gone and perhaps just submit mine. We have got a number of witnesses, but I want to ask that a statement be inserted in the record and make the observation that both administration strategy and the Johnston-Wallop bill recognize that gas is an abundant domestic fuel and available at low cost. But the existing regulatory system impedes the fullest use of natural gas, which is the most environmentally benign and potentially the most available of America's fuel.

I have to confess some level of frustration in this process, and I am glad that the public is in attendance at these hearings to see. Because when you, Mr. Chairman, correctly identified the Appropriations Committee jealousy over its budget allocations as to who gets credited for what portions of EIS's, it is going to be hard for America to come to energy policy if we not only have to fight the other committee's energy turf but their just existing turf criteria as well.

And I have to say, Mr. Chairman, that section 311's inconsistencies are precisely the reason why we need to do some work. I am not giving up faith entirely on the administration's proposal. I share the Chairman's view of how difficult it is going to be.

But if you will, and this is not meant as a criticism but just an observation, that your response on that question was particularly FERCese, that everybody is at risk and no one is at risk and we find the way to resolve that. And it is clear to me over the course of time that not only what we have proposed but additionally what the administration has proposed has go to take place if we really are going to be able to utilize this fuel as a portion of it.

But, Mr. Chairman, I had members here before I was, and I will follow the first-come rule.

[The prepared statement of Senator Wallop follows:]

PREPARED STATEMENT OF HON. MALCOLM WALLOP, U.S. SENATOR FROM WYOMING

Today the Committee is reviewing the natural gas provisions of the Johnston-Wallop bill and the Administration's bill.

Both bills recognize that natural gas is an abundant fuel which is domestically produced and available at low cost.

Both bills also recognize that our existing regulatory system impedes the fullest use of natural gas, which is the most environmentally benign fossil fuel.

These regulatory problems not only deny consumers, our economy and our environment the benefits of natural gas, they also deny producers in States such as Wyoming the ability to market all of the natural gas they are capable of producing. But for the protracted delay caused by the existing regulatory system, pipeline projects such as Kern River could be built much more quickly and far more cheaply.

There are significant policy and technical differences between the two bills, to which I hope today's witnesses will direct their testimony. One provision of the Administration bill which I find intriguing is that of moving FERC into the Department of Energy. In the context of reducing the regulatory burden, it is entirely appropriate to thoroughly review this proposition to determine whether a restructuring of the agency will also help expedite the regulatory process. In the absence of a showing that eliminating FERC would do more harm than good, I will support this provision.

Thus the questions I put to today's witness are: First, are existing law and the regulatory system working so poorly that the public interest requires fundamental change? Second, if only an updating and streamlining is required, which provisions

in the pending bills do you support, and what other perfecting changes would you like to see?

I look forward to hearing the testimony of today's witnesses.

The CHAIRMAN. Senator Bingaman.

Senator BINGAMAN. Thank you, Mr. Chairman.

Mr. Wakefield, I wanted to ask about one of the proposals in your national energy strategy, as I understand it, which was to de-regulate natural gas imports. I was not aware of a problem with section 3 of the Natural Gas Act as it currently operates. Is there some problem here that you folks think needs to be addressed that brings you to recommend this?

Mr. WAKEFIELD. Senator, I am glad you raised this issue, because I think particularly among independent producers, this proposed change in section 3 has been misunderstood. All we are seeking to do in the legislation is to remove a regulatory layer that now requires approvals which have been pretty much a rubber stamp in recent years at DOE. The FERC would continue to have the full jurisdiction they have today over pricing matters and over new facilities that would be built. I think this is a very minor provision in our legislation that has been perhaps, misunderstood particularly by producers who have been concerned that we would be totally out of the business.

Senator BINGAMAN. Mr. Scherman, have you had a chance to focus on that recommendation?

Mr. SCHERMAN. Not really, Senator Bingaman, but we will provide detailed comments on that for the record within the week that the Chairman mentioned earlier.

Senator BINGAMAN. I would appreciate that, please.

Let me ask about another one of the proposals that I understand the Department of Energy is making or the administration is making. Under a new section 7(j) of the Natural Gas Act, as you propose it and as I understand it, FERC could not order transportation service if there is no available pipeline capacity.

Now, I guess my question there is what relief are we contemplating for someone who is left out of the initial allocation of a pipeline's capacity when the proposal to construct is made?

Mr. WAKEFIELD. Well, under the initial proposal I would assume that anybody who is constructing a pipeline would want to get everybody in there who was available to provide service or who wanted service on that pipeline, and the incremental costs of putting a little more capacity on the pipeline at that time would usually pretty marginal. I know there is sometimes a paranoia, perhaps justified in some instances, that somebody will be frozen out. I think generally the market would work to try to include everybody. If there is any intentional conduct that could violate anti-trust laws, of course there is a remedy there. But I am afraid, as we have considered this and whether there should be any kind of mandatory provision, that as you get into discussions a lot of times the cure is worse than the perceived disease.

Senator BINGAMAN. So as I understand what you are saying, you do not think there is a problem here. You do not think that there will be people who are left out and that FERC would have to have authority to deal with that?

Mr. WAKEFIELD. My reaction would be that if I were building a pipeline I would want to include everybody that wanted in. And like I say, the incremental costs up front are pretty small to get a new customer in. So I tend to think there would not be a problem.

I am concerned however, that a remedy, other than the existing antitrust laws could well be worse than the problem. I hesitate to get into legislation that would require a pipeline to expand its capacity or to prorate existing capacity. I think, for one thing, we would start losing a lot of pipeline support for legislation once we do that.

Senator BINGAMAN. Mr. Scherman, how do you deal with that situation, and what is your position on the proposal by the administration?

Mr. SCHERMAN. Senator Bingaman, right now, under existing law, when a question arises in the context of a proposal for new pipeline construction, and a question arises from a potential shipper that capacity was not made available to them or there are allegations that the capacity was allocated on a net unduly discriminatory basis—in other words, potential unfairness—the Commission has generally been requiring the pipeline to hold an open season that says during a certain time period, maybe 30 or 60 days, that anybody who wants capacity on this new facility has a right to compete on an equal basis, and that addresses, I think, the concern implicit in your question.

Under the complaint procedure, that would be changed from a before-the-fact review of the initial allocation to an after-the-fact review of the allocation, and if capacity was not available then it gets into some of the issues that Mr. Wakefield raised.

If, right now, there are no questions in the initial allocation of capacity—that nobody is complaining or the capacity is underutilized—the Commission does not use the open season process, but we have been concerned about the fairness in the initial allocation of pipeline capacity.

Senator BINGAMAN. But I understand, then, that you think it would be important to retain the Commission's authority to order this open season if it determined it was appropriate?

Mr. SCHERMAN. Again, there is a tradeoff—you have to examine the level of competition that exists in any one market prior to constructing the pipeline. If there was not sufficient competition, then I would say yes, we think it might be appropriate to continue some oversight over that initial capacity allocation.

Senator BINGAMAN. Mr. Scherman, let me ask one other question, and that is you have recited the extensive number of certificates issued in the last year or so, and I guess I just wondered if you have anything you can say about the extent of the additional pipeline construction that you anticipate.

I do not know if pipeline construction is like highway construction, where you finally get to a point of saturation or if we are so far away from that it is not a relevant analogy, but how much additional pipeline do you see as likely to be needed in the coming years, and are there proposals to build that pipeline, or is this something we should be concerned about not having?

Mr. SCHERMAN. In anticipation, Mr. Madden has run some statistics on that, and I think he can give you a fairly good breakdown of what is pending currently at the Commission.

Mr. MADDEN. Mr. Bingaman, we have approximately 3,000 certificate applications coming into the Commission every year. However, from that breakdown we have about 100 major construction and operation certificates. Currently in the Commission we have 75 construction and operation certificate applications which value over \$1 million—\$1 million up to the possibility of \$500 million to \$600 million.

The records indicate that there is a great need and desire to put pipe in the ground based on the number of certificate applications we have on file with the Commission. Now, these certificate applications are your traditional 7(c) applications as well as your optional certificate applications, but it appears that there continues to be a steady stream of new construction proposals.

Senator BINGAMAN. That is all I had, Mr. Chairman. Thank you.
The CHAIRMAN. Senator Nickles.

STATEMENT OF HON. DON NICKLES, U.S. SENATOR FROM OKLAHOMA

Senator NICKLES. Mr. Chairman, thank you very much, and to our guests, I appreciate their appearance. I think this is an interesting subject and one that I really hope, Mr. Chairman, that we can make some progress.

I might just add a caveat. I would hope that we would be a little more optimistic in what we can achieve than maybe your original comments were before the committee. I think there is enormous potential for significant improvement over the certification process, over FERC, and I think we should seriously consider, Mr. Chairman, the proposal the administration has talked about as far as moving FERC under the Department of Energy.

We are talking about significant changes, but I will say, Mr. Chairman, that changes are called for. They are needed, and I heard Mr. Scherman talking about the successes and reforms that have been made at FERC and I compliment you for those, but I think those are indicative of the fact that FERC needed some changes, that the procedures were far too lengthy in time, and certainly expensive in their procedures.

I remember being involved—Mr. Scherman, I do not remember how long you have been general counsel, but the Williams case was pending for years before we were—I was elected in 1980, and the Williams case was, I think, 10 years old by the time I was elected and it still took several years to be resolved, and I would hate to think—not necessarily every attorney in this room, but there are a lot of attorneys—a lot of expenses were involved in these cases.

How long did that case take, Mr. Scherman?

Mr. SCHERMAN. My recollection was it took—now, let me correct it, if I am wrong, for the record. I think it took 12 years to go up and down between the Commission and the court. Needless to say, Senator Nickles, that case does not particularly help our statistical outlook.

The CHAIRMAN. Would the Senator yield at that point?

Senator NICKLES. I would be happy to.

The CHAIRMAN. When you came here in 1980, there were also some cases in ERA which was located in DOE at the time——

Senator NICKLES. I understand.

The CHAIRMAN. And some of those are still not resolved.

Senator NICKLES. I understand, and I remember testifying before FERC on several occasions—not several occasions, on a couple of occasions, and I guess I was impressed by as much as anything not the attendance, necessarily, of the five commissioners, but the attendance by hundreds of attorneys, and the fact that the meters were running quite actively and ultimately consumers were paying for those legal fees, and I have always thought that we needed some streamlining.

The bill which the chairman and Senator Wallop have introduced I think are big steps in the direction that Mr. Wakefield—as I understand it the administration wants to go even further, in talking about basically moving FERC under the Department of Energy.

What advantages are there? I happen to be from a State that is a natural gas producer. We produce about 12 percent of the Nation's natural gas. We have enormous reserves. We can increase that percentage, frankly. We have gas that is shut in, we have gas that is underpriced, in my opinion. It is a great buy.

Natural gas not only is the cleanest fuel, but if you look at its cost per BTU to the producer, right now it is very low. It is equivalent of about \$8 per barrel, so if we can increase some access I think we can give consumers a great buy right now, and I hope we would have some increases in the price in the not-too-distant future.

What advantages are there for moving from FERC, or moving FERC basically under the Department of Energy?

Mr. WAKEFIELD. I think they fall under two categories that are both complimentary to what we are trying to accomplish under the NES, Senator Nickles. First, is to really give natural gas a seat at the table when energy, environmental, and economic policy gets made.

I think so many times—when virtually all of the tools for dealing with natural gas are in an independent regulatory agency, so many times when we have discussions within the administration, for example, the use of more natural gas in the Clean Air Act, when you do not have somebody there that is speaking for natural gas, natural gas gets left with the short end of the stick.

I think that happens a lot because you do not have a strong voice for natural gas within the Executive Branch. Our proposal would bring natural gas to the table and give it a much higher profile that it deserves as a fuel that supplies 20 percent of our energy needs in the country.

The other is more structural in nature. Our proposal would have a single administrator rather than five commissioners who have to meet in an open hearing any time more than two of them want to talk together, with television cameras whirring, to discuss any matter to get final resolution.

Our proposal would permit matters to be handled more quickly and permit the administrator to see that policy, as it is determined

at the executive level, gets implemented in the individual cases before administrative law judges; instead of the other way, where cases come up from the administrative law judges after several years, and finally reach the Commission for the Commission's determination of whether they were tried the way it wanted them tried.

So I think it could greatly expedite matters, particularly if you look at the remainder of our natural gas legislation, which I think could serve to cut out a lot of the very complicated multi-party proceedings like the Williams case that you mentioned where there are hundreds of lawyers sitting around with their meters running and their minds mostly in neutral because only two of them are participating.

Senator NICKLES. Mr. Wakefield, thank you very much, and knowing that Senator Johnston also is from a natural gas State, I think there are certain advantages and I would concur with your statement, so I would hope, Mr. Chairman, that we would keep that possibility open.

There are several things that are in the bill that are controversial, and many of which may take a little discussion, but I hope that we will at least keep an open mind to this proposal and try and figure out what would actually be best for consumers and what would be best for the natural gas industry as well.

Mr. Scherman, just a comment. You mentioned several of the certificates that you have been able to move on, but what would be the average time delay right now, if you are talking about a project—and I was thinking of one. We have pipeline built in the Arcoma Basin in Oklahoma. The lead construction—I guess, group, or pipeline group, is Arkla.

I am not sure how long it took for the entire certification process to work on that pipeline, but if you are talking about a pipeline of that nature where you are talking about 225 miles, a significant investment over \$215 million, what kind of time period are you talking about for those 75, I think, that Mr. Madden mentioned that are significant projects? Are we talking about a matter of several years for those projects?

Mr. SCHERMAN. In many ways, Senator Nickles, it would depend on the location of the facilities and the environmental review that would need to take place. Right now, as a general matter—and Mr. Madden will give you some specific statistics—right now, as a general matter in the situation you just outlined, we would in all likelihood be in a position within 4 or 5 months to consider the non-environmental aspects of that proposal.

It would really depend on how much environmental review under NEPA and associated laws that the Commission had to fulfill in bringing that certificate to the Commission, but in a project that had relatively insignificant environmental review, the process could in all likelihood be done in well under a year, and oftentimes 6, 7, 8 months.

We have run some specific numbers on actual average processing times, which Mr. Madden can give you.

Mr. MADDEN. If I may, our average construction and operation in general run in the figures anywhere between 300 to 350 days for the average.

Now, the big projects do take longer for the most part because the environmental aspect is the triggering mechanism. We have run some figures breaking down categories of the major projects from 1 million to 24 million and 24 million to 50 million which we will provide for the record, but in many cases when we have major projects, some of the time frames are out of our control.

For example, the Great Plains Coal Gasification Plant. We had no control for that, yet we had that on our plate at the Commission for over 2,000 days, so that type of project skews the results, but based on present day factors for major construction projects I would say 300 to 350 in general, but up to 450 or more for big projects where we have to deal with other State commissions, other Federal agencies, and we have to conduct major environmental impact statements.

Senator NICKLES. I look forward to getting your information, Mr. Madden, and I appreciate the statements that were made today.

Mr. Chairman, I would be interested in having Mr. Allday's views on some of these issues as well, either by written or whatever.

[The information referred to follows:]

AVERAGE PROCESSING TIME FOR GAS CERTIFICATE APPLICATIONS

The attached data tables and bar charts which are labeled Attachments 1 through 5, include information about the average processing time that the Commission takes in acting on gas pipeline certificate applications.

Attachment 1 shows the number of cases and average processing time in calendar days for all construction/operation certificates completed in each fiscal year from FY1988 to FY1991 (as of February 28, 1991), by dollar range of construction involved. The Commission defines F01 workload as construction and/or operation applications that are not assigned to an Administrative Law Judge (ALJ). Attachment 1 also includes comparative data for formal certificate cases involving hearings before an ALJ that were completed during the same periods. Cases assigned to an ALJ are designated as F02 workload.

The data show that, in general, the average processing time took longer for certificate cases involving larger construction costs. The exception was the 12 cases in the \$100 million and greater range over the period noted above. The Commission took an average of 331 days to process these applications. The processing time for this category, however, included three optional certificate cases where processing times took 106, 145 and 145 days, respectively. This is because most of the environmental work for these three cases had been completed in related applications filed earlier under the traditional certificate procedure. Excluding these cases results in an average processing time of 398 days for this category.

The 10 cases completed in the \$50-100 million range had an average processing time of 836 days. The high average was largely a result of three cases (four dockets) with processing times greater than 1,000 days, and includes:

- 1) A case related to a coal gasification plant (CP83-218-000) which was operated by the Department of Energy after the original owners withdrew from the project. Commission processing was suspended pending sale of the plant to new private owners.
- 2) A proposal to construct facilities to transport gas for system supply (CP86-426-000) which was conditionally withdrawn by the applicant on May 6, 1987 and remained pending for 18 months until formally withdrawn on January 1, 1989.

- 3) A proposal where the applicant was unable to justify construction of proposed facilities due to market deficiencies (CP85-108-000 and CP85-108-001). The case remained pending for over three years during settlement negotiations between the applicant and opposing parties until withdrawn by the applicant on July 27, 1988.

Eliminating these three cases from the analysis results in an average processing time of 473 days for the \$50-100 million category.

The 22 cases completed in the \$25-50 million category had a mean average processing time of 547 days. This average was influenced by one project involving transportation of gas from a coal gasification plant (Docket No. CP83-183-000) with a processing time greater than 2,500 days. The plant was shut down, taken over by DOE and ultimately sold to private interests, thus requiring the applicants to negotiate new transportation agreements. If these dockets are eliminated, the average processing time for the remaining cases in the \$25-50 million range would decline to 445 days. A similar case (Docket No. 85-50-000), requiring almost 2,000 days, had a lesser impact on the zero cost category due to the larger number of cases included in the average.

Additionally, there were 28 dockets related to Florida Gas Transmission (FGT) applications to construct and operate facilities necessary to transport gas for system supply. Although the Commission issued an order on FGT's applications on June 15, 1990, FGT filed a motion on May 5, 1989, requesting that the Commission hold the proceedings in abeyance pending FGT's settlement negotiations with its customers.

Attachment 2 depicts the average processing times for the same categories as in Attachment 1, but without the 37 dockets noted above. Attachment 3 is a bar chart which shows the average processing time for F01 construction and operation certificate applications by cost range - with and without the 37 dockets.

Attachment 4 depicts a broader view of Commission processing times and includes all gas certificate applications involving: construction and/or operation, prior notices for construction or transportation, import/export, emergency transactions, curtailments and abandonments.

Attachment 5 summarizes the same information graphically, but excludes prior notice filings since, by regulation, these are automatically completed 45 days after the filing date unless a protest is filed.

It should be noted that the earlier submittal to the House Environment, Energy, and Natural Resources Subcommittee was based on a total of 893 cases which had been completed at the time the data were generated. A copy of that submittal is enclosed for your information. The current analysis reflects a total of 1,006 completed cases.

Finally, the data for each cost category have been further subdivided by fiscal year. Please note that for some entries the "average" processing time may be based on only one, or a small number, of cases. For example, in FY1991, the Commission issued a certificate to Arkla Energy Resources (Docket No. CP89-2174-000) for Arkla's Line AC, which cost more than \$100 million. Attachment 1 shows that it took the Commission 477 days to process the application, although during the pendency of this process, Arkla was able to operate Line AC under Section 311 of the Natural Gas Policy Act.

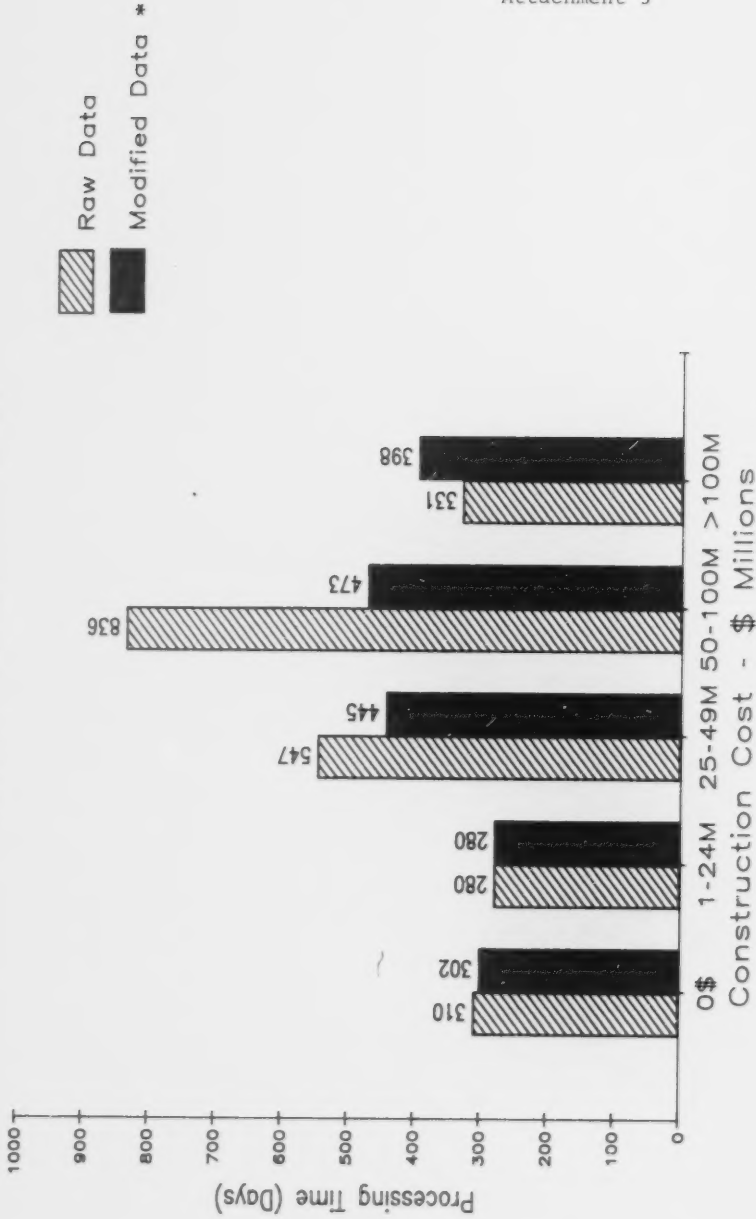
COMPLETED CONSTRUCTION & OPERATION (FORMAL & NON-FORMAL) DOCKETS: F01 & F02

19-Mar-91

(EXCLUDES 37 DOCKETS EXPLAINED IN NARRATIVE)

	NO. OF DOCKETS				AVG. PROCESSING DAYS				TOTAL	
	FY88	FY89	FY90	FY91	FY88	FY89	FY90	FY91		
CONSTRUCTION & OPERATION (NON FORMAL):										
COST: > \$100K	0	5	3	1	9	0	387	389	477	398
COST: \$50K - \$99.9K	0	0	6	1	7	0	0	463	532	473
COST: \$25K - \$49.9K	4	7	10	0	21	726	457	325	0	445
COST: \$1K - \$24.9K	40	34	61	36	171	298	267	366	125	280
TOTAL: COST RELATED CAO (NF)	44	46	80	38	208	337	309	349	145	308
COST: \$0 (NON FORMAL)	270	236	152	60	710	316	337	272	180	302
TOTAL: ALL CAO (NON FORMAL)	314	282	232	98	918	319	332	305	166	303
TOTAL: ALL CAO (FORMAL)	20	6	10	7	43	678	1,144	491	1,080	765
ALL CONSTRUCTION AND OPERATION: (FORMAL AND NON FORMAL)	334	288	242	105	961	340	349	313	227	324

AVERAGE PROCESSING TIME BY CONSTRUCTION COST
FOR CONSTRUCTION AND OPERATION (NON-FORMAL) FILINGS
FOR FY 1988 - FY 1991



*Reflects deletion of 37 dockets explained in narrative.

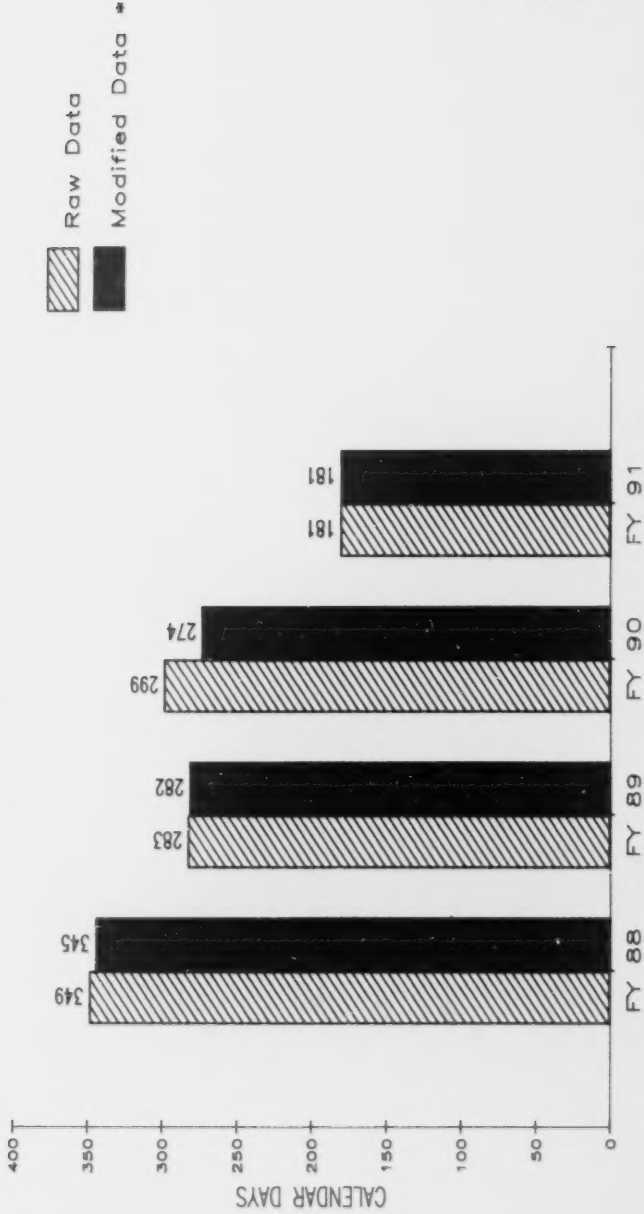
ATTACHMENT 4

CERTIFICATE APPLICATION PROCESSING: FY88-FY91 (TO 2/28/91)

3/19/91

CAT	DESCRIPTION	FY88	FY89	FY90	FY91 (to 2/28)
RECEIPTS					
F01	Const/Oper (Non-Formal)	297	253	220	107
F02	Const/Oper (Formal)	13	16	11	0
F03	Prior Notices	485	1,789	2,017	1,235
F05	Import/Export	65	55	65	14
F07	Emergency Transactions		56	74	44
F08	Curtailment (Non-Formal)	22	21	17	8
F11	Abandonment	125	174	128	61
P/L CERTS TOTAL		1,007	2,364	2,532	1,469
P/L CERTS TOTAL (EXC F03)		522	575	515	234
COMPLETIONS					
F01	Const/Oper (Non-Formal)	316	282	253	102
F02	Const/Oper (Formal)	20	6	22	7
F03	Prior Notices	350	1,741	1,906	1,055
F05	Import/Export	42	51	91	11
F07	Emergency Transactions		56	70	48
F08	Curtailment (Non-Formal)	24	25	15	15
F11	Abandonment	91	108	204	62
P/L CERTS TOTAL		843	2,269	2,561	1,300
P/L CERTS TOTAL (EXC F03)		493	528	655	245
PENDING					
F01	Const/Oper (Non-Formal)	246	217	184	189
F02	Const/Oper (Formal)	25	35	24	17
F03	Prior Notices	164	212	323	503
F05	Import/Export	73	77	51	54
F07	Emergency Transactions		0	4	0
F08	Curtailment (Non-Formal)	11	7	9	2
F11	Abandonment	88	154	78	77
P/L CERTS TOTAL		607	702	673	842
P/L CERTS TOTAL (EXC F03)		443	490	350	339
AVG PROCESSING TIME (DAYS)					
F01	Const/Oper (Non-Formal)	337	334	343	180
F02	Const/Oper (Formal)	678	1,143	655	1,080
F03	Prior Notices	59	54	52	52
F05	Import/Export	581	417	363	632
F07	Emergency Transactions		5	2	8
F08	Curtailment (Non-Formal)	46	49	40	36
F11	Abandonment	289	238	298	172
P/L CERTS TOTAL		228	107	115	76
P/L CERTS TOTAL (EXC F03)		349	283	299	181
AVG TIME W/O 37 SPECIAL CASES:					
P/L CERTS TOTAL		226	107	107	76
P/L CERTS TOTAL (EXC F03)		345	282	274	181

GAS CERTIFICATE APPLICATIONS
AVERAGE PROCESSING TIME IN CALENDAR DAYS
FROM RECEIPT TO COMPLETION
FY 1988 - FY 1991 *



* Includes all gas certificate applications involving: construction and operation, import/export, emergency transactions, curtailments, and abandonments.

* Excludes processing time for 37 dockets explained in narrative.

(October 11, 1990 Submission)

AVERAGE PROCESSING TIME FOR GAS CERTIFICATE APPLICATIONS

The attached data table and bar chart, labeled Attachments 1 and 2, include the information requested concerning the breakdown of average processing times by dollar range.

Attachment 1 is a data table which shows the average processing time in calendar days for all construction/operation certificates (workload category F01) completed during FY88-FY90 broken down by dollar amount of construction involved. It reflects the number of cases represented by each dollar category, the total processing days for that category, and the mean average processing time in days. For reference purposes it includes comparative data for the F02 work category (formal cases involving ALJ hearings) completed during the same period.

The data show that the average processing time was generally greater for the cases involving larger construction values with the exception of the 11 cases in the over \$100 million range. An analysis of these cases reveals that the 318 day average was greatly influenced by three optional certificate cases which had processing times of 106, 145 and 145 days respectively. These three cases had unusually short processing times because virtually all of the environmental work had been done examining related pending cases filed earlier under the traditional procedure. If these three cases are not included in this category, then the average processing time would be 388 days.

The nine cases falling in the \$50-\$100 million range had a mean average processing time of 870 days. This average was largely a result of three cases with processing times greater than 1,000 days. These processing times are attributable to:

A case related to a coal gasification plant which was operated by the Department of Energy for a long period, after the original owners withdrew from the project. During this time (2,663 days), Commission processing was suspended pending sale of the plant to new owners.

A proposal to construct facilities to transport gas for system supply. The application was conditionally withdrawn by the applicant on May 6, 1987 and remained pending for 18 months until finally withdrawn on January 1, 1989.

A proposal where the applicant was unable to justify construction of proposed facilities due to market deficiencies. This case remained pending for over three years during settlement negotiations between the applicant and opposing parties until withdrawn by applicant.

If these cases were eliminated from the analysis then the average mean for this category would be 463 days.

(October 11, 1990 Submission)

Attachment 2 is a bar chart which shows the average processing time for each construction cost range with and without the six cases with exceptionally high or low processing times.

Please note that the earlier data provided were based on a total of 877 cases which had been recorded as completions at the time the data were generated. The current analysis reflects a total of 893 cases including 16 for which completion data have been more recently received.

ATTACHMENT 1
(October 11, 1990 Submission)

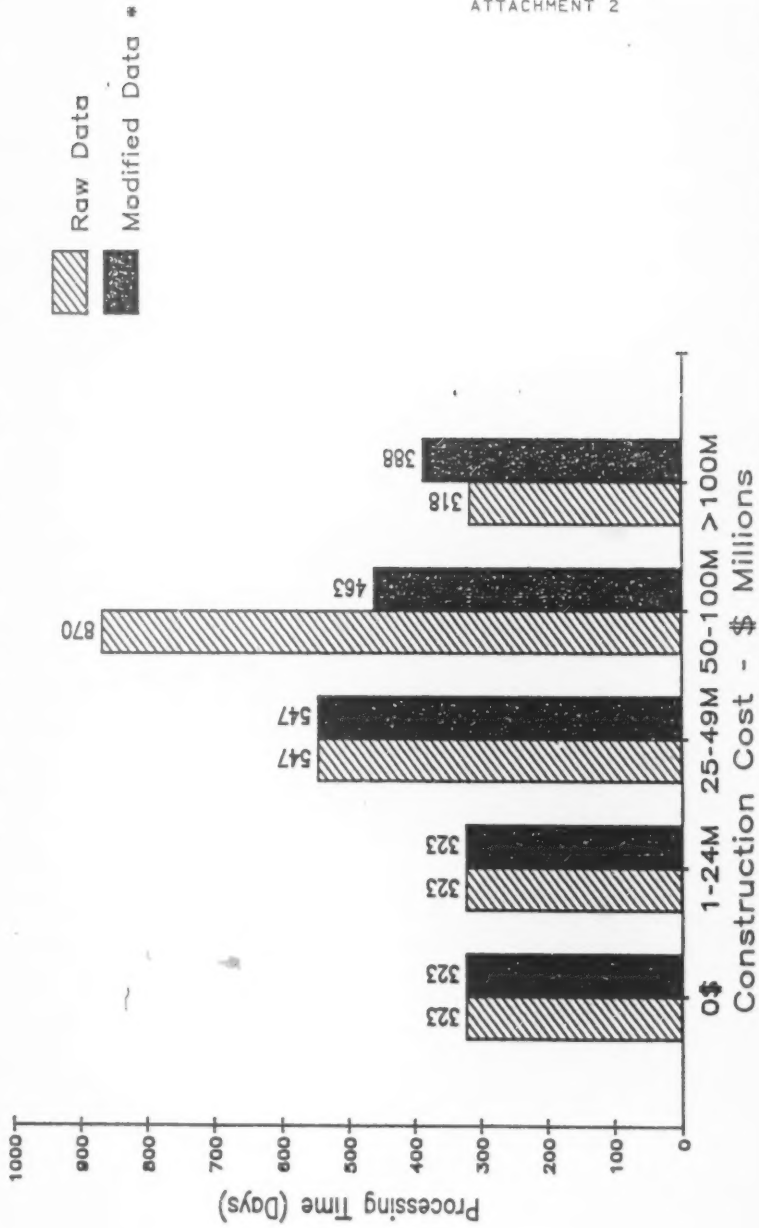
COMPLETED CONSTRUCTION AND OPERATION (FORMAL & NON-FORMAL) DOCKETS - F01 & F02
10/1/87 THROUGH 9/20/90

	NO. OF DOCKETS	TOTAL PROCESSING DAYS	AVERAGE PROCESSING DAYS
CONSTRUCTION & OPERATION (NON-FORMAL):			
CONSTRUCTION COST > 100M	11	3499	318
CONSTRUCTION COST 50-99.9M	9	7827	870
CONSTRUCTION COST 25-49.9M	22	12040	547
CONSTRUCTION COST .1-24.9M	133	42974	323
AVG PROCESSING TIME FOR COST-RELATED CONSTRUCTION	175	66340	379
CONSTRUCTION COST = 50M	670	216414	323
AVG PROCESSING TIME FOR ALL NON-FORMAL CONSTRUCTION FILINGS	845	282754	335
CONSTRUCTION & OPERATION (FORMAL):			
AVG PROCESS TIME FOR ALL FORMAL CONSTRUCTION FILINGS	48	34852	726
OVERALL PROCESSING TIME FOR ALL CONSTRUCTION (FORMAL AND NON-FORMAL)	893	317666	356

(October 11, 1990 Submission)

ATTACHMENT 2

AVERAGE PROCESSING TIME BY CONSTRUCTION COST
FOR CONSTRUCTION AND OPERATION (NON-FORMAL) FILINGS
FOR FY 1988 - FY 1990



* Reflects deletion of 6 cases noted in summary with high/low process times.

(October 11, 1990 Submission)

GAS CERTIFICATE APPLICATIONS PROCESSED

The number of completions listed on Appendix B can be broken down by dollar amount as follows:

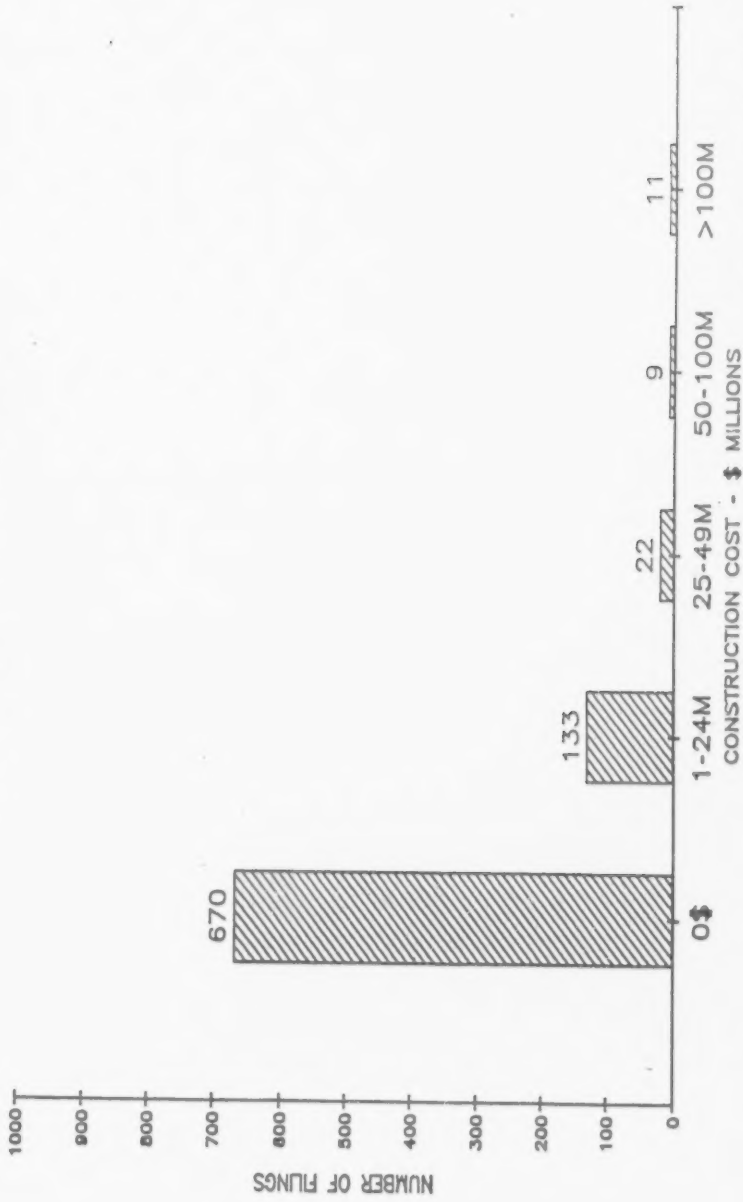
<u>Construction Cost</u> <u>(\$ Million)</u>	<u>Number of Cases</u> <u>(Completed)</u>
(Nonformal "F01")	
Greater than \$100	11
Between \$50 and \$99	9
Between \$25 and \$49	22
Between \$1 and \$24	133
No Cost (\$0)	<u>670</u>
Total	845
	=====

Dollar values for receipts and pending cases fluctuate because the dollar values associated with the original application often change during the pendency of the application as a result of the deletion or addition of facilities.

The attached graph shows the number of cases for each dollar value range.

(October 11, 1990 Submission)

CONSTRUCTION AND OPERATION (NON-FORMAL)
 FILINGS PROCESSED
 FY 1988 - FY 1990



SOURCE: KICTS Data System.

APPENDIX B

(OCTOBER 11, 1990 SUBMISSION)

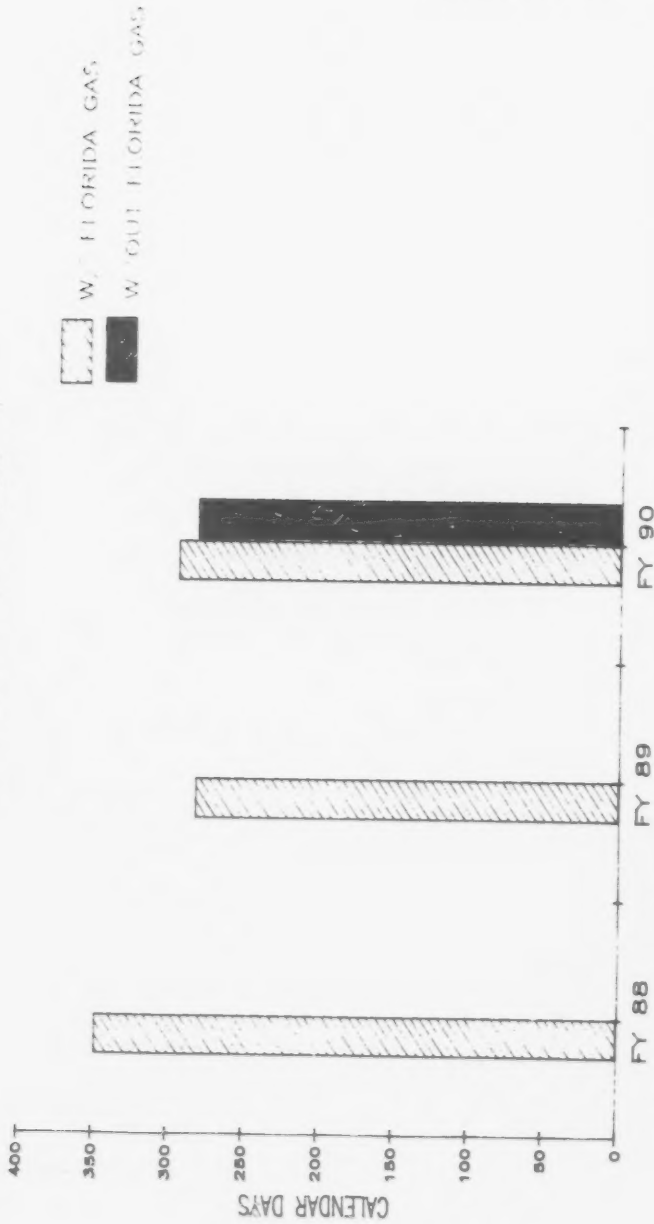
CERTIFICATE APPLICATION PROCESSING: FY88-FY90

10/1/90

CAT	DESCRIPTION	FY88	FY89	FY90
RECEIPTS				
F01	Const/Oper (Non-Formal)	297	253	200
F02	Const/Oper (Formal)	13	16	11
F03	Prior Notices	485	1,789	1,935
F05	Import/Export	65	55	63
F07	Emergency Transactions		56	66
F08	Curtailment (Non-Formal)	22	21	12
F11	Abandonment	125	174	121
=====				
P/L CERTS TOTAL		1,007	2,364	2,408
P/L CERTS TOTAL (EXC F03)		522	975	473
COMPLETIONS				
F01	Const/Oper (Non-Formal)	316	282	236
F02	Const/Oper (Formal)	20	6	17
F03	Prior Notices	350	1,741	1,758
F05	Import/Export	42	51	89
F07	Emergency Transactions		56	66
F08	Curtailment (Non-Formal)	24	25	15
F11	Abandonment	91	108	186
=====				
P/L CERTS TOTAL		843	2,269	2,367
P/L CERTS TOTAL (EXC F03)		493	528	609
PENDING				
F01	Const/Oper (Non-Formal)	246	217	178
F02	Const/Oper (Formal)	23	35	29
F03	Prior Notices	164	212	389
F05	Import/Export	73	77	49
F07	Emergency Transactions		0	0
F08	Curtailment (Non-Formal)	11	7	4
F11	Abandonment	88	156	89
=====				
P/L CERTS TOTAL		607	702	738
P/L CERTS TOTAL (EXC F03)		443	490	349
AVG PROCESSING TIME (DAYS)				
F01	Const/Oper (Non-Formal)	337	334	352
F02	Const/Oper (Formal)	678	1,143	693
F03	Prior Notices	59	54	52
F05	Import/Export	581	417	362
F07	Emergency Transactions		5	2
F08	Curtailment (Non-Formal)	46	49	40
F11	Abandonment	289	238	281
=====				
P/L CERTS TOTAL		228	107	115
P/L CERTS TOTAL (EXC F03)		349	283	296
=====				
AVG TIME W/O FLORIDA GAS (1990: 19 Dockets):				
P/L CERTS TOTAL		228	107	110
P/L CERTS TOTAL (EXC F03)		349	283	283

(OCTOBER 11, 1990 SUBMISSION)

GAS CERTIFICATE APPLICATIONS
AVERAGE PROCESSING TIME IN CALENDAR DAYS
FROM RECEIPT TO COMPLETION
FY 1988 - FY 1990 *



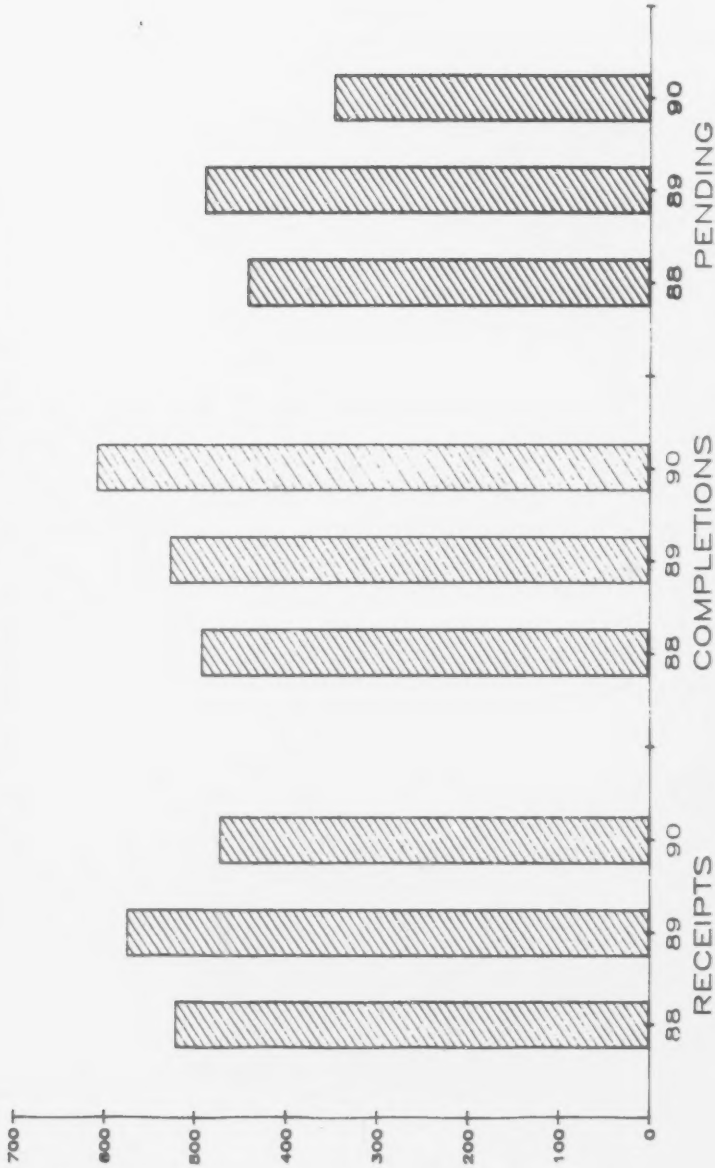
* INCLUDES ALL GAS CERTIFICATE APPLICATIONS INVOLVING: CONSTRUCTION AND OPERATION, IMPORTS/EXPORT, EMERGENCY TRANSACTIONS, CURTAILMENTS, AND ABANDONMENTS.

* EXCLUDES PROCESSING TIME FOR THE FLORIDA GAS DOCKETS WHICH WERE BEFORE THE ALJ AND BEYOND THE CONTROL OF STAFF.

SOURCE: KICTS DATA SYSTEM

(OCTOBER 11, 1990 SUBMISSION)

GAS CERTIFICATE APPLICATIONS PROCESSED
FY 1988 - FY 1990 *



* INCLUDES ALL GAS CERTIFICATE APPLICATIONS INVOLVING: CONSTRUCTION AND OPERATION, EXPORT/IMPORTS, EMERGENCY TRANSACTIONS, CURTAILMENTS, AND ABANDONMENTS.

SOURCE: KICTS DATA SYSTEM

Senator NICKLES. But I think we can make some real improvements here, and maybe some improvements that are long overdue, and again I am not slighting anybody at FERC or the past, but I think some improvements are called for, they are long overdue, and I would hope that we would be pretty aggressive.

Natural gas is a big industry in your State as well as it is in my State and the State of New Mexico, in Texas, and again, it happens to be the cleanest fuel that is available. It is one that I hope that we will be aggressive on in this package to help us.

It is one of the few things that can really help assist those of us in the Lower 48 out of this package, and so I would hope we would come up with a strong component under title X.

The CHAIRMAN. Well, we certainly will. That is our plan, to be aggressive. I think our package is aggressive. It will be made even stronger by amendments have been suggested. Senator Bingaman has some, and others.

I think there is a difference, though, between just moving to DOE as opposed to changing the rules. My own view is that moving to DOE does not solve all the problems. You have got to change the rules.

Senator NICKLES. It may not, but correct me if I am wrong, Mr. Wakefield, but by the move—by the change, you would be with a greatly strengthened administrator, is that correct?

Mr. WAKEFIELD. Yes, that is correct, sir.

Senator NICKLES. Again, I think it is something we should debate, we should consider, and discuss the pros and the cons, but I think there is a lot of merit to that. If I am wrong, I am happy to hear from people who know more about it than I and certainly we will consider their views.

Thank you, Mr. Chairman.

The CHAIRMAN. Gentlemen, we have a panel of four witnesses after this panel, so I ask you to keep that in mind as you question.

Senator Wirth.

Senator WIRTH. Thank you very much, Mr. Chairman. I will be very brief—just quick questions.

Mr. Wakefield, you noted in your opening comments natural gas use was down over where it was 20 years ago. Why is that? Can you give us those figures again and your quick explanation as to why you think that is?

Mr. WAKEFIELD. In 1970 we consumed 21 trillion cubic feet of natural gas in this country. Last year—I do not know if the final figures are out, but it will be around 18 trillion cubic feet of gas.

Senator WIRTH. Why that change?

Mr. WAKEFIELD. I think there are probably a number of reasons. One certainly is that during the 1970's we had shortages and we had the Government suggesting we were running out of the resource, which deregulation proved that we were not, and we had concerns about curtailments and the reliability of the fuel.

I think a lot of those concerns have dissipated, but today we still have a difficulty, and this is one that faces new consumers of natural gas as they try to determine what fuel to use in, for example, an electric utility or co-generation plant—the concern over regulatory uncertainty, how long it will take to get the facilities in, what terms and conditions might ultimately be imposed upon them—so

what we are trying to do is move to a system that will both permit parties to go faster and to make their own deals that will be subject to review by the companies and by the investors rather than by the regulators.

Senator BUMPERS. Senator Wirth, could you add something to that? I would like to know, Mr. Wakefield, what the recoverable reserves of natural gas were—known recoverable reserves—in 1970 and what they were in 1990.

Mr. WAKEFIELD. I would be glad to provide specifics for the record, but I believe they were probably more in 1990 than they were in 1970.

Senator WIRTH. That was, to me, a surprise. I had missed those figures as they went by.

What is responsible for that? I think that kind of analysis would be useful to us. If we are looking at barriers that have caused less rather than more usage of natural gas we ought to be eliminating those barriers, I would think.

Mr. WAKEFIELD. I think there certainly were barriers, of course. Wellhead regulation contributed greatly to the shortage. There were prohibitions written into the laws—

Senator WIRTH. I understand that, but those are not there any more.

Mr. WAKEFIELD. I think today it is the regulatory uncertainty and delay more than anything, and I might add to Senator Bumpers' question, there is a report that was provided in 1988 suggesting what the recoverable resource base of natural gas was, and it indicated, I think, some 35 years at current levels of consumption at prices of about \$3.

Senator WIRTH. Have you done an analysis of these barriers? Is there something that DOE has done, looking at barriers to the use of natural gas?

Senator WALLOP. Tim, would you just forgive one thing? Because it is relevant to what you asked.

I think you maybe misspoke yourself, Mr. Wakefield. It was not wellhead deregulation that contributed to the shortage, was it?

Mr. WAKEFIELD. Wellhead deregulation helped the problem. It was wellhead price controls at the time that contributed to the shortage.

Senator WALLOP. We all understood you to have said that wellhead deregulation had contributed to the shortage, and I did not want to let that pass into the sky.

Mr. WAKEFIELD. Thank you.

Senator WIRTH. I understood what you were saying. I think it would be useful for us to have whatever analysis you all have done as to what those barriers are and which are going to be the most productive areas to pursue. If there is a long list of 10 or 15 or 20, which are going to yield the greatest return for fast action by the committee?

Mr. WAKEFIELD. We will provide that for the record, Senator.

Senator WIRTH. That would be helpful, I think.

[The information requested was not received at the time the hearing went to press.]

Senator WIRTH. Let me ask you a quick question, if I can, about Iroquois, Mr. Scherman. When we went through all of the discus-

sion of Iroquois in tying Canadian gas into the New York system and New England and the East Coast, at that time there was a good deal of discussion about inequities in the regulatory system that were unfair to American producers, and FERC agreed at that time, as I remember, to do an analysis of what those inequities were and what ought to be done about it, is that not correct?

Mr. SCHERMAN. I am not quite sure I recollect it that way, but we can certainly do that, Senator Wirth.

Senator WIRTH. I thought that you all had had a responsibility for doing that.

Mr. SCHERMAN. We do it on a case-specific basis when allegations about the rates that you mention arise. The Commission has said recently that it will, in fact, in each of the individual pipeline rate cases look at those allegations and has directed the parties to consider it.

I do not recollect being asked—and I apologize, sir. I do not recollect being asked for a sort of general analysis on that issue.

Senator WIRTH. Well, I thought that, given that discussion, that that was one of the things that you were charged with looking at, and I would appreciate any response that you might have to what efforts you are doing to look at this equity issue that was so much part of the controversy when we debated this 6 or 9 months ago.

Mr. SCHERMAN. If I could real quickly, Senator Wirth, the Commission has recently directed that in each pipeline rate case where this issue is raised by an independent producer, for example, or somebody raising the allegations that the operation of Canadian rate designs and American rate designs produces an unfair competitive advantage, the Commission has directed that the parties must consider that in the rate design case, and we can provide a full explanation of that for the record.

Senator WIRTH. If you could do that, it would be helpful.

[The information referred to follows:]

Explanation of Commission's directive that parties consider allegations of anticompetitive effects of differences in Canadian and U.S. rate design in rate cases.

The Independent Petroleum Association of America (IPAA) and other organizations or groups representing domestic producers of natural gas have expressed concern that the difference in how natural gas sales and transportation rates are designed in the United States and Canada may result in Canadian natural gas imported into the United States having a competitive advantage over domestically produced gas.

There are two basic methodologies for designing rates at issue here. The first is the fixed-variable rate design methodology. Under this methodology, all fixed costs are recovered in the demand portion of the rate, and all variable costs are recovered in the commodity component. The level of demand charges paid by a customer is determined by contract demand charges are paid regardless of whether the customer actually takes any service during the billing period. Commodity charges are incurred only to the extent a service is actually used by the customer. The second rate design methodology is the modified fixed-variable methodology. Under this methodology, all fixed costs except return on equity and taxes related to that return are included in the demand component of the rates. All variable costs and the return on equity and related taxes, which are fixed costs, are included in the commodity portion of the rate. Thus, recovery of return on equity and related taxes is not guaranteed. These costs are recovered only to the extent the subject service is actually used.

While the fixed charges for a service will be higher under a straight, as opposed to modified, fixed-variable rate, the variable costs will be lower, as all fixed costs will have already been paid. The transportation rates of most U.S. pipelines are designed using the modified fixed-variable methodology, or a variation thereof, which includes some percentage of fixed costs in the commodity component of rates. Canadian transportation rates, on the other hand, are generally designed using a straight fixed-variable methodology. This makes the Canadian gas costs appear to be lower than U.S. gas costs.

The Commission addressed the problems associated with differences between Canadian and domestic gas sales rates in Opinion No. 256. [37 FERC ¶ 61,215 (1986)] With respect to gas sales rates, there are two major types of costs recovered: gas costs (e.g., production-related costs) and transmission costs (e.g., pipeline costs related to transporting the gas). Generally when natural gas is purchased from Canadian producers, the gas sales rate paid by the purchaser at the border includes both types of costs, gas costs and transmission costs, in the demand component of the charge. In Opinion No. 256, the Commission determined that pipelines purchasing Canadian gas for resale in the United States must recover the various costs

included in the charges paid for the gas from their customers in the same manner that they would recover those costs were the gas purchased from a domestic producer, regardless of the manner in which the costs are billed by the Canadian supplier. Thus, the Commission required that production related gas costs included in the Canadian demand charge, must be recovered through the pipeline's commodity charge, just as the pipeline would recover such costs if the gas were purchased from a domestic producer. Likewise, the Commission determined that the transmission costs included in the charge for gas from Canadian suppliers must be recovered by the pipeline from its sales customers in the same manner as it would recover transmission costs were it selling domestic gas. Thus, the Commission required that fixed return on equity and taxes related to transportation billed by the Canadians in the demand component of their rates must be recovered by the domestic pipeline through the commodity portion of its sales rate. In this manner, the Commission assured that domestic and imported gas sold for resale in the United States would compete on a level playing field, with no competitive distortion resulting from differences in rate design.

However, Opinion No. 256 dealt only with sales for resale rates. The situation addressed by Opinion No. 256 involved a pipeline proposing to purchase and take title to Canadian gas at the border, then sell it for resale within the United States, under the jurisdiction of the Commission. On rehearing of Opinion No. 256, the issue of a pipeline's customer (G.D., a local distribution company) taking title to the gas at the border and using the jurisdictional pipeline for transportation service only, thereby circumventing or avoiding the principles of Opinion No. 256, was raised. It was argued that the Commission could not achieve the objectives of Opinion No. 256 (equal treatment for Canadian and domestic gas supplies) unless all importers of natural gas, including local distribution companies, were subject to the same constraints. It was urged that the Commission refer the matter to the Secretary of Energy to establish a "uniform national policy" for all imports. In its order on rehearing, Opinion No. 256-A, the Commission stated that "if the Secretary of Energy thinks action is needed, the Secretary of Energy will take the appropriate action." [39 FERC ¶ 61,218 (1987) at 61,772]

Opinion Nos. 256 and 256-A involved one pipeline, Natural Gas Pipeline Company of America. In subsequent orders, the principles of Opinion No. 256 were applied prospectively on a case by case basis, as opposed to in a generic proceeding. Hence, their impact was felt incrementally, as the Commission considered each case in turn. The Commission exempted Boundary Gas Inc. and Great Lakes Gas Transmission Company from the principles of Opinion No. 256, in light of their functioning merely as conduits in sales transactions.

At issue in Iroquois and other recent proceedings before the Commission was the situation referenced above, where the entity within the Commission's jurisdiction is providing only transportation service, with title to the gas passing to a nonjurisdictional entity at the international border. For the reasons discussed below, the Commission has determined that the most effective forum for addressing any potential anti-competitive effects resulting from rate design differences in such situations are individual pipeline rate cases.

As noted above, the variable costs of service under a straight fixed-variable rate are low, limited in the case of transportation service essentially to the cost of fuel to provide compression. Because Canadian transportation rates are designed using a straight fixed-variable methodology, while domestic transportation usually carries modified fixed-variable rates, there may be an economic incentive for customers to purchase and ship Canadian gas, since use of U.S. facilities to ship domestic gas carries a higher variable cost. However, in the recent cases before the Commission, the Commission recognized that allowing a domestic pipeline to charge a straight fixed-variable rate for transportation over new facilities constructed to transport Canadian gas, while retaining the modified fixed-variable rates in effect for existing facilities that transport Gulf and Southwest supplies, might increase any incentive to make purchasing decisions based upon non-market related factors.

The Commission noted in its decisions that it could address the distortion of purchasing decisions described above by conforming the rest of the domestic pipelines' systems to the straight fixed-variable approach proposed for the new facilities, so that the rate treatment for the new and existing facilities would be the same. However, the Commission further noted that it could not accomplish that result in certificate proceedings because the pipelines' entire rate structures were not before the Commission. Therefore, the Commission concluded that the only remedy available to counter the "tilting" effect described above and ensure a more level playing field in the proceedings at hand was to require the pipelines to charge initial rates for the new facilities designed using the same methodologies underlying the rates for their existing facilities attached to U.S. supplies. The Commission advised the parties, however, that any domestic interstate pipeline which desires to modify its existing rate design may file an application with the Commission under section 4 of the Natural Gas Act to do so. The Commission is currently conducting an in-depth examination of its rate design practices and policies in individual rate cases, pursuant to guidelines set

forth in a rate design policy statement issued in May 1989. As the Commission stated in Iroquois,

Those proceedings are the appropriate forums within our jurisdiction for addressing the concerns voiced by IPAA. If IPAA or others raise the issue of a potential anticompetitive preference for Canadian versus domestic gas supply in those proceedings, all interested parties and the ALJ's shall thoroughly examine the issue and devise and consider appropriate and effective solutions. Together with the other objectives in the Rate Design Policy Statement, those solutions will ensure that both sales and transportation of Canadian and U.S. domestic gas are treated in a fair and nondiscriminatory manner.

Various parties suggested other possibilities for addressing these issues in the context of certificate proceedings. The IPAA and other domestic producer groups have urged the Commission to take action similar to that taken in Opinion No. 256 with respect to the transportation-only situations. However, as there have been no Canadian gas or transmission costs proposed to be passed through to any customers in the transportation rates proposed in the various projects, the concerns addressed in Opinion No. 256 are not present in the recent cases before the Commission.

It has also been suggested that the Commission could require the restructuring of underlying transactions so that there would in all cases be a sale for resale by an interstate pipeline. Then, the Commission could apply the principles of Opinion No. 256. However, the suggested action is beyond the jurisdiction of the Commission. The Commission has no authority to modify the sales agreements between the third party shippers and their Canadian suppliers, all of whom are outside of our jurisdiction. Such action by the Commission would be an improper intrusion upon the jurisdiction of the state regulatory authorities (who have jurisdiction over local distribution companies and electric generation shippers), of Canadian regulatory authorities (with jurisdiction over the Canadian producers and pipelines), and Department of Energy, Office of Fossil Energy (DOE/FE) (which has jurisdiction over the terms of the import).

With respect to DOE/FE, we note that in exercising its regulatory authority over imported natural gas, the Commission "cannot . . . take actions inconsistent with the terms, conditions, or policy considerations" reflected in DOE/FE's import authorization. (Wisconsin Gas Company, 770 F.2d at 1156) Pursuant to the policy guidelines issued contemporaneously with the order delegating the responsibility to authorize imports to the Administrator of the Economic Regulatory Administration (now the DOE/FE), DOE/FE bases its determination of whether a proposed import is in the public interest upon consideration of the

competitiveness of the import, the need for natural gas, and the security of supply. [New Policy Guidelines and Delegation Orders From the Secretary of Energy to the Economic Regulatory Administration and Federal Energy Regulatory Commission Relating to the Regulation of Imported Gas (49 Fed. Reg. 6684). See also Delegation Orders Nos. 0204-111 and 0204-112.]

DOE/FE, having jurisdiction over the gas purchase costs, exercises that jurisdiction in authorizing imports. In short, DOE/FE, having the authority to determine the competitiveness of the gas proposed for importation determines that imports which it authorizes will be competitive and that will not discriminate unfairly against domestic gas supplies or affect the competitiveness of the overall arrangements.

Competitiveness of an import arrangement is assessed by the DOE/FE's consideration of the entire fabric of the arrangement. In this regard, the specific terms and conditions of the gas purchase contract are examined to determine if the arrangement, as a whole, is competitive. The policy guidelines also recognize that gas import arrangements and international commercial agreements are subject to the policies and laws of both the buyer's and the seller's governments. The trade policy of the U.S. strongly supports contract sanctity as an important factor in international commercial transactions; the policy guidelines specifically warn against governmental action which unilaterally renegotiates gas import contracts. While the Commission may take actions, as necessary, which may indirectly affect the import authorization granted by DOE/FE, requiring modification of the gas purchase contracts between the U.S. purchasers and their Canadian suppliers would be inconsistent with DOE/FE's authorizations in connection with these projects and is thus beyond the authority of the Commission. [See *TransCanada Pipe Lines Ltd. v. FERC*, 878 F.2d 401 (D.C. Cir. 1989)]

The Commission must also exercise its authority over imported gas in a manner consistent with the United States-Canada Free Trade Agreement (FTA). (Free Trade Agreement, Jan. 6, 1988, United States-Canada, __ U.S.T. __, 27 I.L.M. 281, T.I.A.S. No. __, implemented by, United States-Canada Free Trade Agreement Implementation Act of 1988, 102 Stat. 1851, as amended, 103 Stat. 1833.) The FTA is intended to eliminate, to the maximum extent feasible, governmental barriers to free trade between the U.S. and Canada. In general, the FTA directs each country to accord "national treatment" to the goods of the other country.

The "national treatment" obligation means that laws and regulations should not discriminate between foreign and domestic energy on the basis of nationality. For example, imports of Canadian natural gas and electricity will, under both GATT and now the Agreement as well, be accorded treatment no less favorable than

U.S. natural gas and electricity, under all U.S. laws and rules respecting the sale licensing, shipment, distribution, and use of gas and electricity.

This obligation extends to rules and decisions of the Federal Energy Regulatory Commission (FERC) . . . and to other U.S. Federal and State governmental agencies.

[United States-Canada Free Trade Agreement Implementation Act of 1988, Report of the Committee on Energy and Commerce, House of Representatives, H.R. Rep. No. 100-816, Part 7, 100th Cong., 2d Sess. at p. 7 (1988)]

This means that the Commission must accord Canadian energy supplies treatment that is no less favorable than the treatment accorded U.S. supplies. The FTA requires that each country's domestic energy laws and regulations should not discriminate between domestic and foreign goods on the basis of nationality.

Under the FTA, "Canada gains assured nondiscriminatory access for its energy exports to the United States, and the U.S. gains assured access to Canadian energy supplies to meet its imported energy requirements." [United States-Canada Free Trade Agreement Implementation Act of 1988, Report of the Committee on Energy and Commerce, House of Representatives, H.R. Rep. No. 100-816, Part 7, 100th Cong., 2d Sess. at p. 6 (1988).] On the other hand, "FERC . . . is not required to assure Canada's success in this competition, and U.S. regulations that might indirectly lead to lower Canadian sales volumes or prices in the United States do not necessarily mean that Chapter Nine's 'national treatment' obligation is being violated." [United States-Canada Free Trade Agreement Implementation Act of 1988, Report of the Committee on Energy and Commerce, House of Representatives, H.R. Rep. No. 100-816, Part 7, 100th Cong., 2d Sess. at p. 7-8 (1988).] In sum, the FTA requires the Commission to maintain a level playing field with respect to its regulation of the transportation of natural gas so that neither Canadian gas nor domestic gas suffers a disadvantage from the Commission's regulatory policies.

There have also been suggestions that the Commission apply some sort of adjustment to domestic pipelines' transportation rates to increase the transportation commodity charge to offset costs contained in the demand component of the Canadian sales rate which would have been contained in the commodity portion of the sales rate were it a jurisdictional sale under Opinion No. 256. In addition to the practical problems associated with such an approach, the Commission rejected this suggestion as inconsistent with the FTA. Consistency with the FTA's "national treatment" obligation would require that, if projects that transport Canadian gas would be subject to such an adjustment, domestic projects would also have to be subject to that

mechanism. This would mean that, in assessing whether proposed domestic supply projects were in the public convenience and necessity, the Commission would have to analyze the aggregated demand and commodity charges in the transportation rate and the gas purchase contracts associated with the project in question. If the jurisdictional and nonjurisdictional (i.e., gas supply contract) aspects of the proposed cost recovery mechanism considered together resulted in a lower commodity rate than competing domestic supplies, the Commission would have to adjust the proposed jurisdictional transportation rates to offset the commodity rate advantage. However, the Commission does not engage in this sort of analysis and does not require such adjustments for new domestic gas supply projects.

Gas supply costs are irrelevant to the determination of an unbiased transportation rate design. In contrast, the analysis of the "aggregated demand and commodity charges in the transportation rate and the gas purchase contracts," that must be performed under the type of adjustment discussed above would necessarily involve the Commission in an examination of gas supply costs along with transportation costs.

There are good reasons for the Commission to avoid the regulation of gas supply costs associated with the adjustment approach, be it in the context of domestic or of imported gas supply projects. Under an adjustment-type mechanism, the Commission would require significant information about gas sales contract to be filed by domestic producers and would have a significant impact on nonjurisdictional gas sales contracts even where the pipeline is not proposing to flow gas sales costs through its rates and is not a party to the gas purchase or sales contract. The adjustment mechanism is thus inconsistent with the national policy to decontrol wellhead gas prices embodied in the Natural Gas Policy Act and the Natural Gas Wellhead Decontrol Act of 1989. By affecting the price and possibly other terms and conditions of their gas sales contracts, the suggested adjustment would also, in effect, impose some degree of regulation upon Canadian producers, which also are not subject to the Commission's jurisdiction.

We recognize that requiring, as we have, pipelines to use the same rate designs for facilities carrying Canadian gas as for those carrying domestic supplies will not completely level the playing field from the wellhead to the burner tip given the fact that the Commission cannot regulate transportation rates within Canada. However, it is the best result possible within the limitations of the Commission's jurisdiction and a certificate proceeding. More substantial steps can be taken, as appropriate, in the context of individual rate proceedings.

Senator WIRTH. Just a final question. Is there anything in the administration's energy program that precludes the export of natural gas, or oil for that matter, from ANWR to the Pacific Rim?

Mr. WAKEFIELD. I do not believe that is in there.

Senator WIRTH. Could you let us know?

Senator MURKOWSKI. I might be able to clarify that. There is a prohibition of export of oil from the pipeline.

Senator WIRTH. From the pipeline, but that is written into the law now, but as you are proposing to open up ANWR, is there anything in that that precludes any of the product that might, were ANWR to be opened—which I hope it is not—that precludes that from being exported?

Mr. WAKEFIELD. I am not aware that there is.

The CHAIRMAN. Yukon Pacific presently has a section 3 determination from DOE to export natural gas from Prudhoe Bay to the Pacific Rim.

Senator WIRTH. They can export natural gas, is that right?

Mr. WAKEFIELD. That determination has been made, yes, Senator Wirth.

Senator WIRTH. The rationale for that is what, rather than building a pipeline to tie into Canada and come down to the United States?

Mr. WAKEFIELD. I believe—and this was before my time, but I believe the determination was that there were adequate markets both for gas to the lower 48, if and when that pipeline is built, and for gas to be exported for the Yukon Pacific project. Whether that project will be built or not I think will depend upon the economics of it and whether adequate markets in the Far East can be found.

Senator WIRTH. I had asked last week to have DOE send us your analysis of alternative fuel vehicles proposal. There have been a number of those analyses that must have been made at DOE, ranging all the way from what you think the potential of that might be, how large is the fleet, what the costs are going to be. DOE had promised to have that up here, and I hope we might get that.

Mr. WAKEFIELD. We will get that to you. Of course, we do have the provision in there for alternative fuels vehicles in our—

Senator WIRTH. But there were other more ambitious programs that had been initially advocated within DOE, as you know, and you were going to send information on that up to us. And second, send an analysis, a comparison of what was in your proposal now to what the President had originally proposed in the Clean Air Act in December of 1989.

I think your current proposals are significantly more timid than what the President had initially proposed in the summer of 1989. And you all were going to get to us a comparison of those two.

Mr. WAKEFIELD. We will see that that is done, Senator.

Senator WIRTH. Thank you very much. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Wirth.

Senator Murkowski.

Senator MURKOWSKI. Thank you, Mr. Chairman.

I might comment on the sensitivity of my colleague from Colorado on ANWR as well as the arctic gas by the pipeline authority precludes the export of any oil through that pipeline by congress-

sional mandate and the realization that when ANWR is open, assuming we find oil there, or there is no other transportation alternative to move that oil out, then a lateral over to the existing pipeline. So for all practical purposes, I would advise my colleague from Colorado that that in itself would preclude the export of oil.

Senator WIRTH. My question related to natural gas, if I might.

Senator MURKOWSKI. Well, it was also ANWR, if you recall.

Senator WIRTH. Natural gas is what we are concerned about, if we can get an answer from you, Mr. Wakefield. Thank you.

Senator MURKOWSKI. Mr. Chairman, I am concerned with the issue of incentives here because the legislation proposes, basically, opening up new markets for natural gas, new pipelines, assuming those would go into areas where there is not the availability of gas. And then the reality of our track record where we are actually down in our usage, so we are anticipating convertibility. And that suggests more gas being available and we are generally agreed that there is more gas, deep gas, shallow gas.

But I am concerned with what the price structure has to be to bring this gas into a competitive market, when we can assume that oil will continue to be a major factor simply because of the tremendous reserves in the Mideast, when they get back on line where we assume the Saudis will reduce production, Kuwait will come back on line with 2 million to 3 million barrels a day. Iraq, at some point in time, is going to need to maintain a cash flow. So you are going to be competing on a BTU comparative price.

And the dictate of that, plus what you have to have to have an incentive to bring this gas, what does that do for the American consumer? In other words, what is he or she ultimately going to be paying, assuming that we are going to supply these new areas and these new markets, and indeed, bring about a greater utilization of gas which will free other forms of energy, whether it be hydroelectric or what have you?

Mr. WAKEFIELD. I do not know that anybody can accurately predict what the price of natural gas will be at some point in the future, although it is widely considered that it will remain very competitive with oil, which it is and in fact is underpriced on a BTU basis today.

I think that it is in everyone's interest, producers and consumers alike, that we have a more efficient system so that lines can be built more quickly and so that shippers and customers can work out their own negotiated transactions rather than have the regulators tell them how they are going to operate their systems, and what kind of deals they are going to have.

I think that our proposals can provide a much more efficient economic market than we have today, that can both serve to keep prices down to consumers but also to bring them up to more reasonable levels at the wellhead. Right now they are about half the price of residual fuel oil, which is very difficult to understand.

Senator MURKOWSKI. Well that is what concerns me, the thing that is very difficult to understand. Because we have had substantial reserves of gas. Yet our gas utilization is down as the figures have indicated by the panel. And as a consequence of that, what is it going to take to get greater utilization of gas?

I am told by those that want to go out and drill for it or develop fields, that the price has to go up. I am told by others that if you get greater volume utilization, well the price does not have to necessarily have to go up because there would be more gas utilized.

And the issue is much more complex than that, I grant you, but there has got to be an incentive here for the consumer to utilize more gas and that can be a price incentive, a conversion factor, any number of things. But clearly, it is going to have to be there because it is a given that we have the gas. And we can distribute the gas at a price.

Anybody want to try it?

Mr. WAKEFIELD. Let me make one more comment, if I could, Senator. I think we not only need to do what we can to remove regulatory delays and uncertainties, but also do what we can to help the gas industry develop new market and we do that in the NES legislation with alternative-fueled vehicles.

Senator MURKOWSKI. I have not got any problem with that. I completely agree. I am just interested in where the consumer is going to come out on the end of this thing, and I am not getting much in that area.

Mr. SCHERMAN. Senator, if I could add a little bit to what Steve said, clearly there are both supply and demand issues that should be addressed. And in addition to the alternative fuels, you will be considering next week, amendments to the Public Utility Holding Company Act. That would open up the generation market for electric utilities. Clearly, for the gas industry, that is a major new market area.

Senator Johnston has been in the leadership on that, for a year and a half now. The administration has a separate bill that merits attention. The price of gas to consumers has generally gone down in the last several years as competition at the wellhead and competition in the distribution chain has intensified.

Clearly, however, if you look at even EIA data, clearly the same downward trend has not been as significant to prices to consumers as it has been to producers and pipelines.

Senator MURKOWSKI. Well you said price has gone down, but so has utilization of gas. So if one uses that as an example, if gas is going to have greater utilization one would assume the price has to go up. Would you agree with that?

Mr. SCHERMAN. Yes, but you are operating right now in a situation which there is an oversupply. Supply and demand are not in equilibrium. When you get supply and demand in equilibrium, then I think your thesis is absolutely correct.

Senator MURKOWSKI. My last question. The pre-build which provides access from Canada to the West Coast, and then there is a line that goes across and into the Dakotas, and it is my understanding that that line is currently, basically, fully utilized with Canadian gas. That line, of course, was built initially with the theory that as soon as the Alaska gas pipeline from Prudhoe Bay was built, the United States would supply that gas from Alaska rather than Canada.

But clearly, the economics of amortizing the costs of a domestic pipeline from Alaska through Canada and into the State of Washington, and then through that pre-build, was a factor that reality

dictated we could never be competitive with the price of Canadian gas, which is much closer. The Canadians want the U.S. dollar. They have got substantial supplies of gas and behind the Alberta Gas is Canadian Arctic Gas.

So while the Canadians maintain that in effect, an agreement was made, almost a treaty, clearly they are supplying the gas in the meantime and have every indication to do so. I am told that if the Alaska Gas could ever come down, the pre-build would have to be expanded or looped or something.

Would anybody care to comment on that extraordinary dilemma and series of circumstances that exist today as opposed to what the public was sold as a package would be the reality of what would be occurring, that Alaska would be supplying that gas rather than Canada?

Mr. WAKEFIELD. I think part of what happened, of course, was that the cost estimates for the Alaska segment of the pipeline went up so significantly at the same time that the price of gas in the lower 48 was dropping, and that were are moving from a shortage to a surplus, that trying to build that line at that time just was not economically justified.

Senator MURKOWSKI. But it was justifiable to build the pre-build.

Mr. WAKEFIELD. Yes, but that line was certainly much shorter and certainly much lower in cost, and it came on line just as the natural gas shortage turned into the natural gas glut. Almost as soon as it came on, a lot of the contracts, a lot of the people in the lower 48 who had contracted to buy that gas wished they had not.

Insofar as your question about the line itself is concerned, the line was sized in a way that compression can be fairly and relatively inexpensively added when the Alaska gas does come on so that considerably more can flow through the line.

Senator MURKOWSKI. I was told that the line is at its capacity and I would appreciate somebody, for the record, indicating whether it is or it is not. I do not know. Does anybody know?

Mr. MADDEN. The Northern Border pipeline, which comes down there is full, is filled to capacity most of the time. But there is a proposal before the Commission for an expansion of the Northern Border project.

Senator MURKOWSKI. And where would they get the gas?

Mr. MADDEN. I think that would be all Canadian gas.

Senator MURKOWSKI. Thank you. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. Senator Shelby.

Senator SHELBY. Thank you. Mr. Chairman, I have a written statement I would like to be made part of the record.

The CHAIRMAN. Without objection.

Senator SHELBY. Mr. Chairman, I am not going to be able to be here for the next panel, and this is one of my most important events today because I have a distinguished constituent, Mr. Ron Kuehn, testifying on the next panel, and I have got some questions that I would like to ask, for the record, regarding his testimony, if the chairman would permit me.

The CHAIRMAN. Yes. Of course.

Senator SHELBY. Having said that, I have some concerns that I will address to the panel, regarding the regulatory delays. If it is in the Department of Energy or if it is in FERC, if it is 10 years, even

8 years, or 12 years, something is wrong. Something is wrong with the regulatory process. And if you are having extensive delays, I think they have to be looked at as impediments.

And if we are dealing with natural gas, which is the cleanest, or if not the cleanest, of our fuels, as far as the environment is concerned, what is the problem? What is really going on?

The industry deserves better but the consumer deserves better. I support some of the amendments proposed by the Senator from New Mexico, Senator Bingaman. I have read some of the testimony here today of this panel and the second panel, too. And if we do not streamline the regulatory process where you can move something, where you can say yes or no—maybe that is too simple, but that is the bottom line—then something is wrong with FERC. Something is wrong with DOE.

When you start talking about moving FERC to the DOE, you say, what the heck, why would you do that? I would ask that question today.

Mr. SCHERMAN. On the what the heck part, I will let Steve answer. Go ahead.

Mr. WAKEFIELD. I think the answer, Senator Shelby, is that the two go together. It is not just move FERC and do not do anything else. It is try to cut out a lot of the necessity for regulatory filings and approvals at the same time.

Senator SHELBY. If you could show me how it would really streamline the regulatory process, I might be open to something like that. I am not set in concrete on anything, but I am totally against regulatory delays or regulatory impediments, delay for delay. And a lot of that is buried in not just FERC, not just Energy, but in so many of our bureaucracies here in Washington. And you wonder how American business, whether it is gas or what, is surviving with this kind of an adversary. And that is basically what it is.

Mr. SCHERMAN. Senator Shelby, I agree. And I think ever since Chairman Allday came to the FERC, he has been, having come from the business community—

Senator SHELBY. Absolutely.

Mr. SCHERMAN [continuing]. And not as familiar with the bureaucratic—

Senator SHELBY. My remarks were not addressed to him, but very general.

Mr. SCHERMAN. But I think he shares your concerns, and I think you two have discussed that. He has been trying ever since he came to the Commission to streamline the process. He has, as he likes to say, been leaning on the staff to do so. I think we are making progress. Obviously, a lot more needs to be done. We are trying to automate our process to the greatest extent possible. We are trying to make more of our authority self-implementing that they would not need case-specific authority.

Some of the proposals that Senators Johnston and Wallop have put in, and Senator Bingaman, will certainly help us.

Senator SHELBY. Especially in the area of replacement of gas lines or gas pipe. Heck, they have been there. They are doing it all the time, for safety reasons and other things. Why such delays there?

Mr. SCHERMAN. Under our existing authority, if it was replacement of facilities, then there would not need to be specific authorization. However, in recent years——

Senator SHELBY. The "however." Go ahead, I want to hear this.

Mr. SCHERMAN. Well, in recent years, and I will let Mr. Madden speak on the specific part of this, there had been some concern expressed that there were some environmental consequences associated with replacement of facilities, especially as to toxic substances. And that is why the Commission has decided to take a look at that issue again.

Senator Bingaman's amendment would codify preexisting Commission authority that the Commission is currently examining in its notice of proposed rulemaking.

Senator SHELBY. I just want to say this and I will yield my time back. As a member of this committee, I want to work with whatever will bring about an expeditious way to review applications pending at FERC. Whatever is the best thing to make it work. Not impediments, not delay, but sound, prudent decisions quickly as you can make them.

Mr. Chairman, thank you for your time.

The CHAIRMAN. Thank you. Senator Craig.

Senator CRAIG. Thank you, Mr. Chairman. I have one short question—I think it will be short—to Mr. Wakefield, and it is not unlike the question that my colleague has just asked about. The process and the ultimate delays that are apparent and the time constraints involved, in the administration's proposals that relates to section 202, NEPA compliance, there is an effort to streamline, as it relates to environmental impact statements.

In that process you suggest that it would permit the Commission to do the environmental impact statement and that that impact statement would serve as the only one necessary and so on and so forth. And the Commission could charge an applicant directly for the environmental documentation costs.

Our colleague from New Mexico has an amendment that says that would not have to be done in-house, that it could be done by contractors so specified. Now if we are really looking at streamlining, why are we looking to bring everything in-house? Why, in fact, can we not so designate and therefore provide to the private sector an opportunity to participate and maybe have a laundry list of those who are qualified to do such acceptable studies and get them back as quickly as possible so that we do not have this backlog, if you will, inside the Commission?

Mr. WAKEFIELD. Let me comment on that and then Mr. Scherman may want to talk about it from his perspective. I think it is absolutely right that we can use consultants, outside consultants a lot more in the process. I think we have to be careful to select those contractors who do not have any conflict of interest. I think there is probably a significant question that is raised as to whether the actual selection of that contractor should be done by the agency or by the applicant.

But in the final analysis, while those contractors and consultants can do a lot of the work, the final determination still, by law, has to be made by the agency. So yes, I think we can speed up the process a lot and help the process, but we cannot totally eliminate the

need for the agency to review the documents and make the final determination.

Mr. MADDEN. Senator, whether third-party contracting is provided or whether you have a list of contractors, the Commission, or we believe at this stage that we still must insure that there is no conflict of interest. And we must still do our own independent analysis. We always recommend to the pipelines to provide us with the proper environmental documentation before they come in a file the application. And in many cases, they use contractors or their in-house staff to prepare those documents.

I think as being lead agency, what is necessary is just to make sure that all the documents, environmental analysis documents, comes in at appropriate times so that analysis occurs when a decision has to be made at the time so that a pipeline can make the appropriate decision and meet its in-service date.

Senator CRAIG. I have no difficulty with that. I do have difficulty with the sole responsibility line, when in fact you can job it out, if you will, or a pipeline can, under a recommended list. And obviously, final analysis has to rest with the Commission, and the credibility of the study has to be judged.

Mr. SCHERMAN. Senator Craig, I do not think Senator Bingaman's amendment, where there would be a list of contractors, I do not think we would have any problem with it as long as the Commission retained some authority as to the qualifications and the type of environmental contractors that would go on the list that applicants could choose from.

Senator CRAIG. In section 10, I guess, it specifies that a contractor shall be chosen by FERC at its sole discretion. You would not have difficulty with that?

Mr. SCHERMAN. No, sir, we would not.

Senator CRAIG. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Craig.

Senator Domenici.

STATEMENT OF HON. PETE V. DOMENICI, U.S. SENATOR FROM NEW MEXICO

Senator DOMENICI. Thank you, Mr. Chairman. First of all, let me, again, to you and Senator Wallop, from my standpoint, apologize for my delay this morning and for not being able thus far to be here for all of your meetings. I think you know I have every good intention, but it turns out other chairman are not concerned about your schedule and you are not concerned about theirs, and so there are three or four at the same time.

Having said that, let me say to both you and Senator Wallop, I think this may be the last train for a while, this bill, to set in place a situation which maximizes the use of natural gas in this country. And I would hope that from what I have heard from you and from Senator Wallop that you clearly intend that. Natural gas is in the United States of America in abundance.

And frankly, with the discovery of new kinds like coal bed gas which may indeed be in quantities to maybe 40 percent of the current reserves again may just be from coal seam methane gas, it seems to me that we ought to take every opportunity in this bill to

maximize the use of it, and it is not all with reference to regulations, obviously, and automobiles, Mr. Chairman, we ought to move vigorously for natural gases as an alternative.

Now, having said that, I have a particular concern, nonetheless, about the—as we move toward deregulation, I have a concern for the independent producer. I know Chairman Allday has regularly said he is concerned about the independent producer in this country.

Frankly, I want to start by just saying to the chief counsel for FERC, I have become convinced that while I do not know the solution to the problems that FERC creates or has been given—maybe they do not create anything, maybe they are just given some insurmountable problems—I have come to the conclusion that we can put all of the well-meaning Alldays in the chairmanship, and it is not going to get fixed.

Frankly, I believe it is just too complicated, and I must say you and those who are counsel and legal advisors on the staff, you run the show, and I do not believe there is any way to get around that. I mean, Mr. Allday says, I really want to, but in the final analysis, you do. And I am not saying that is bad, I am just saying you have a very significant interest, in my opinion, in trying to keep FERC sort of like it is.

And you may be filled with integrity in saying it is very important and we need it, but I am very suspicious that we do not need everything about FERC. But I do not know how to fix it yet. I compliment the administration for at least saying something is wrong.

Now, Mr. Chairman, I want to add one other thing. As we attempt to fix this so that natural gas is maximized in its use in this country, we ought to be concerned about our independence and the Canadian Free Trade Agreement.

And let me say to you, Mr. Wakefield, while Canada is a great ally, I will tell you, when it comes to how they are going to react toward our independent producers who want to compete and do not want any preferential treatment, let me tell you, if you are not aware of the fact that the independents in this country make a good case, that they do not have such good deal when it comes to the Canadian importation to this country—exportation, import by us—then I am sure before this legislation is through you are going to find out that the independents have a case with reference to how we bill and how FERC and other treat Canadian gas in terms of its competitive price qualities.

So for starters, let me just say, it was suggested at one point that rubber stamp provisions might be eliminated. I think you were answering that question for my colleague, Senator Bingaman. Well, I want to suggest to you that Martha Hesse came here once before this committee, and she looked into a situation with reference to Canadian gas. And the Commission now has adopted rule 256 which, in a sense, may be one of these rubber stamp provisions that we should get out of the business of worrying about. But I submit to you we should not, and you should not be too quick to do that, because it is a way for Canadian natural gas to come into this country will all appearances of being competitive when, as a matter of fact, it is more expensive.

And I am very concerned about that. I cannot get the Commission too concerned about it. They do not read the report on the Canadian Free Trade Agreement the way we thought they would. This committee put language in that free trade agreement saying what we thought, and that was that they would have leave to regulate, based upon situations like 256. They are now beginning to say they do not, that it is just not anything they can get involved in because of the free trade agreement. So I hope you will be concerned about that.

So let me ask you a couple of questions that have to do with independents, Mr. Wakefield. First, I thank the chairman and ranking member, because they put in this bill that they have before us a provision that we asked them to put in that would give the independents a chance to collaborate in the marketing of natural gas.

I think you understand; I remember how expert you are when you came before us. Your background is one of an expert in this field. Independents have a difficult time versus pipelines and getting their product to market. Well, we want to give them a chance to compete by waiving the anti-trust laws so they can form cooperatives to market their natural gas. I hope you will look at that and be able to support it as our chairman has, and Senator Wallop, in their bill.

MR. WAKEFIELD. I think that is a very good Senator. I think it is very difficult for independents to be able to aggregate their supplies in a way that they can move them together, find markets, do anything other than just sell to the pipeline. We have tried to take care of that with a few other provisions such as the mandatory interconnection.

I have, in private practice, put together groups of independents that have arranged this kind of marketing agreement. I think the Department of Justice probably should have the final say from the administration's standpoint on the legislation and how they view it. That is probably their issue, but I can say that conceptually I am certainly in agreement with you.

SENATOR DOMENICI. Well, I understand, Mr. Wakefield, but, you see, you are telling us that the reason you want to move some of this authority over to the Department of Energy so you can be a proponent for natural gas. And I am merely suggesting that when this provision goes to justice I hope you are a proponent, because they like to know from the Department of Energy if it is important that independents have a waiver so they can market their supplies better. And I hope you will be that—

MR. WAKEFIELD. I can assure you I will be, and in fact I have indicated to the Independent Producers Association I would glad to go with them to the Justice Department.

SENATOR DOMENICI. Now, my staff tells me that—and I was not here for most of the morning, as you know. But you propose to de-control pipelines where they are serving markets that have more than one pipeline, and also where third parties have access to transportation. Now, I am concerned about that situation, where on the other end of the pipeline there may not be the same competitive situation.

Producers may not have the opportunity to be served by more than one pipeline. The result would be obvious to the producers in

that they are captive. They are in a captive situation. They would be the only ones absorbing the competition, which they are sort of complaining about already, you know. Do you intend that this situation be considered before a pipeline is deregulated?

Mr. WAKEFIELD. Absolutely. I think that would be a factor. And of course for a pipeline to get this deregulation, it would be required of them to go to FERC and to have a hearing in which these are the exact kinds of issues that we would anticipate would be raised.

Senator DOMENICI. Let me get back to the situation on our border with Canada. Am I correct in saying that the administration proposed legislation that would strip both DOE and FERC of the authority to enforce what we have been calling Opinion 256? Am I correct in stating that it would strip these or the successor agencies of authority to close loopholes in Opinion 256?

And let me read you the section that you propose, that I think is of concern: "Upon a finding that the exportation of natural gas is in the 'national interest,' the President may waive any law relating to the exportation or importation of natural gas by schedule or otherwise"—I will not read the rest of it. Now, let me tell you, I would be concerned that national—what does national interest mean? Just backs out oil? Is that enough?

Mr. WAKEFIELD. It should not be, and my understanding of this provision is that it is similar to emergency provisions in other laws. But we very clearly do not intend in this legislation—and if it is poorly drafted we can certainly change that. But we certainly do not consider that FERC would lose any of their existing authority, including their authority to reallocate costs as they have under Opinion 256.

Senator DOMENICI. So you really want this to be almost a security situation or an extraordinary situation, not just a national interest in the sense of it backs out some oil so we can get rid of these kind of reasonably imposed regulations for American independents.

Mr. WAKEFIELD. That is correct. We are talking about dealing here with what I would call national emergency—threatening the national security.

Senator DOMENICI. Now, while am all for some of the amendments to streamline regulation and regulatory process for our pipeline industry, let me ask you what I do not think is terribly hypothetical. If you need Mr. Scherman to help you—as I indicated, some of this gets so complicated that you need them.

One of the amendments that is proposed would give FERC the authority to designate pipeline projects for so-called fast track and judicial review. Now, there are conditions which the applicant must show. I want to ask you, are you familiar with the Iroquois pipeline and the process that went on?

Mr. WAKEFIELD. Somewhat, although certainly not as much as Mr. Scherman.

Senator DOMENICI. All right. Well, let me just state it and then maybe Bill can answer it if—if the Iroquois pipeline were able to make these prima facie showings of reduction of imported oil, et cetera, would it have qualified for such treatment? Do you know?

Mr. WAKEFIELD. I think I better let Mr. Scherman answer that.

Mr. SCHERMAN. Senator Domenici, it is very possible that they could have, but as we understood from Senator Bingaman's amendment, the proposal is to procedures and is not intended to dictate the outcome of a certificate. We raised this question in our prepared testimony to make clear that this was a designation for a certain procedural track of 12 months. But the Commission as well as all other Federal and state agencies would be free to grant or deny the requested certificate. And that was one of the questions we asked for clarification on.

Senator DOMENICI. Oh, I see. What you are saying is, you would get fast track based upon these kinds of proofs, but they would not necessarily impact on the solution. The solution would be predicated upon current set of circumstances, right, that you use now?

Mr. SCHERMAN. As we understand Senator Bingaman's amendment, the fast track is based upon a prima facie showing, which is a different evidentiary hurdle than you need to get for a certificate.

Senator DOMENICI. My last question—thank you—will be this one, and I thank you for your patience, Mr. Chairman. This is to Mr. Scherman.

I am concerned, as I indicated, that FERC has an awful lot of power, and I think it comes somewhat from the fact that it is so complicated, and complicated processes yield enormous regulatory power, in my opinion. So let me ask you, was the national energy strategy legislation discussed with members of FERC and FERC staff, to your knowledge?

Mr. SCHERMAN. Yes, sir. We participated in the interagency process. We had to be careful because of some of the concerns that we have about our ex parte rules. But on general policy, we participated in the process, yes.

Senator DOMENICI. So in a sense, you were asked for your opinion but you were not asked—for your advice, but you were not asked whether you support it or not; is that a fair way to say it?

Mr. SCHERMAN. Yes, sir.

Senator DOMENICI. So if you had disagreed, do you have the right to say so?

Mr. SCHERMAN. I would presume so, yes.

Senator DOMENICI. Would you care to give us your personal view of the proposal? You do not have to; I just asked if you would care to.

Mr. SCHERMAN. On the entire proposal?

Senator DOMENICI. Well, I mean, I do not want you to go into detail, but, you know, they basically have a premise, a philosophy, and a set of proposals, and I guess I am going to ask you whether you care to do that; I do not insist.

Mr. SCHERMAN. As I said earlier, I think there are many proposals in both Senator Johnston's and Senator Wallop's bill, as well as in the NES, there are many proposals there that merit a lot of consideration. They build upon a pro-market philosophy that I think the Commission has been trying to implement for many years. So in many ways, they complement and expand what the Commission has already done.

Senator DOMENICI. So is it fair, then, to say to you that if your views were substantially negative toward this proposed body of change, is it fair to assume that you would not let those views by

you as chief counsel affect your decisions at FERC or your dealings with parties before FERC? Is that fair?

Mr. SCHERMAN. Yes, sir.

Senator DOMENICI. And are you suggesting, for the record, and stating that that has been the case? Have you been, in your opinion, fair to anyone coming before you, not suggesting that they ought to agree with your views on FERC?

Mr. SCHERMAN. I hope I have been, sir. I try to be.

Senator DOMENICI. Well, I really am not trying to be cute or anything. I think it is very simple for you to say yes or no. I mean, have you ever suggested since the administration recommended this to anyone before FERC that you do not think the President's proposals are good and they ought not support them, or not?

Mr. SCHERMAN. We have raised concerns about various policies, but as I said earlier, we generally support the approach that is being taken. There may be specifics, but generally we agree with the pro-market approach that they are taking, yes, sir.

Senator DOMENICI. Thank you very much, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Domenici.

Gentlemen, thank you very much for your testimony. We will be following up with some further written questions.

Next, we have a panel with Leighton Steward, who is chairman of the board of Louisiana Land and Exploration Company; Ronald Kuehn, who is chairman and CEO of Sonat; Robert B. Catell, who is president and chief operating officer of Brooklyn Union Gas Company; and F. Joseph "Joe" Graham, who is director of energy policy and supply with Union Carbide.

As it happens too often here, our time is limited. So I am going to have to ask witnesses to sum up.

Now, I must leave here by 12:20—that gives us 40 minutes. Why do we not try to go about 6 or 7 minutes, sum up, and that will give us time to do some questioning. I apologize to you for that. But believe me, we will read—in fact, I have read your statements—other members will read your statements in full. But I would like to get on some of the high points.

So why do we not begin with you, Mr. Steward.

STATEMENT OF H. LEIGHTON STEWARD, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, LOUISIANA LAND AND EXPLORATION CO.

Mr. STEWARD. Thank you, Mr. Chairman, members of the committee.

I am appearing here as Chairman of the Louisiana Land and Exploration Company, one of the largest independent producers of natural gas.

Now, as a producer whose reserves are over 60 percent gas, and who markets to all segments of the industry, LL&E is greatly interested in new legislations and regulations affecting the transportation and sale of natural gas.

We have submitted written comments for the record which provide response to the technical aspects of the proposed legislation, and the components of the National Energy Strategy.

I want to take this opportunity to make some general observations.

First, natural gas can and should play a vital role of the effort of the Nation to become more energy efficient and less vulnerable to foreign energy sources, while enhancing the quality of our environment.

Second, the ability of my industry to find natural gas has been demonstrated. We have replaced 94 percent of production over the last 5 years, despite having recent prices that make economics questionable. Natural gas is currently selling at about \$8 per barrel equivalent. Low prices are having their effect. The number of exploratory wells dropped by 25 percent from 1989 to 1990.

Third, we support the efforts of all the proposed legislation to increase the efficiency of the transportation of natural gas from the well head to the consumer. The elimination of price controls at the well head have brought competition and efficiency painfully to the producer.

But industry needs the distribution network to behave more like a competitive market. So we believe in making it easier to construct new natural gas facilities. New pipelines mean more competition. And more competition and efficiency in the distribution networks means a smaller differential between producer prices at the well head and consumer prices at the burner tip.

We are opposed to the Government mandating the use of any particular fuel. Why? Because locking in on any one fuel eliminates competition and development of potentially superior alternatives. But we are confident with the availability of relatively low priced and the environmental advantages of natural gas, and that will make it the fuel of choice for many users—fuel of choice if disincentives to its use can be eliminated. These are disincentives such as regulatory inefficiencies, limited access to new exploration areas, and excessive construction delays which should not be allowed to hinder the development of the gas markets.

I would like to particularly commend you, Senator Johnston, and others who support PUHCA reform. The proposed reforms will encourage new investors to engage in competitive activities to provide new sources of electricity, and therefore new opportunities for the use of clean, burning natural gas.

We support initiatives to expand leasing in the offshore areas, and also in ANWR. It is important to realize that one-fourth of America's natural gas resources are in the OCS. The technology clearly exists to develop these domestic energy sources while safeguarding the environment. And it also strengthens our national security in the process.

Turning to specific provisions of the proposed legislation, we support expedited certification of new natural gas pipeline construction. We support provisions to build pipelines with or without a limited Federal certificate, as long as these facilities are constructed at risk. We believe such provisions will encourage new investors to enter the pipeline business and lead to lower transportation cost. However, to realize these benefits fully, these new at-risk pipelines should not be considered natural gas companies under the Natural Gas Act so long as they remain at risk.

Companies at risk will not want to subject themselves to the intrusive regulations required for a natural gas utility. With respect to proposals to better manage compliance with NEPA, a consolidat-

ed review requirement would be one of the greatest contributions Congress could make to facilitate the pipeline construction process. Consolidation of the oversight process with FERC could result in the same environmental protection and substantially less delay.

Under the standard certification process, the cost of the construction—including the cost associated with delay—are paid by the taxpayer. It is clearly in the public interest to reduce those costs and pass the savings on to the customer. Time is money.

In the area of expediting construction, we support the goal of Senator Bingaman's proposed amendments, which is to streamline the procedures for issuing traditional section 7(c) certificates. We believe that maintaining the 7(c) option is important and Senator Bingaman's proposal will help expedite that process.

We believe the sale and distribution of natural gas as a vehicular fuel should be exempted from the Natural Gas Act that now requires a seller or transporter to become a regulated utility. This exemption will truly act to enhance competition and ensure widespread availability of service.

In regard to the administration's energy strategy, particularly those provisions to deregulate sale, interstate pipelines have failed to demonstrate that all parties are sufficiently able to access the services they desire, or certainly not at competitive rates. This subject is generally referred to as comparable services.

Until transportation and storage services are adequately unbundled, defined, and priced through rate reform, and made available through the comparability of service requirement, we do not think that regulatory oversight should be eliminated.

Despite open access transportation rules, there remains the residual danger of monopoly powers arising from the insufficient availability of comparable transportation services.

Finally, I believe that the proposal to reorganize FERC by making it an administrative body within the DOE is not timely, even if it should be subsequently be found to be prudent. The adjudicatory role of the FERC cannot be as effectively provided by an administrative body. The gas transportation and sales businesses are in transition, and the new rules are being formulated that affect the profitability of these businesses.

Bipartisan oversight of the evolving transportation policies is a necessary component to ensuring fair play. The DOE has advocated a major new role for natural gas and the energy use. In our view, the advocacy role and the adjudicatory role should not be mixed at this time. The process of certification in new facilities and the resolution of rate reform and comparability issues needs to be accelerated. But all this could be severely hampered by changing the location of administrative authority, and may inhibit the DOE in its proper exercise of the role of promoting efficient and secure energy systems for this Nation.

Mr. Chairman, as Chairman of NGSA and a member of IPAA, I thank you for leaving the record open so written comments can be submitted by NGSA, IPAA, and other interested parties.

Mr. Chairman, that concludes my remarks and I thank you.

[The prepared statement of Mr. Steward follows:]

WRITTEN COMMENTS

OF

H. LEIGHTON STEWARD

CHAIRMAN AND CHIEF EXECUTIVE OFFICER
THE LOUISIANA LAND AND EXPLORATION COMPANY

BEFORE THE SENATE ENERGY AND NATURAL RESOURCES COMMITTEE

MARCH 7, 1991

WASHINGTON, D.C.

INTRODUCTION

Mr. Chairman, members of the Committee, my name is Leighton Steward. I am Chairman and Chief Executive Officer for The Louisiana Land and Exploration Company, one of the top forty U.S. public oil and gas companies and one of the nation's largest independent producers. LL&E operates domestically in many of the major producing regions in the lower 48 states including Louisiana, Texas, Oklahoma, the Rocky Mountains, and the Gulf of Mexico. We also have international operations in several countries including England and Canada. As a producer whose proved reserves are over 60% natural gas and who markets to all segments of the industry, we are very interested in legislation and regulations affecting the transportation and sale of natural gas.

I want to first make some general observations about the requirements of the natural gas industry as they relate to proposed changes:

○ LL&E supports the efforts being proposed to increase the production of natural gas. Although natural gas provides more than 20% of all the primary energy used in the United States, domestic natural gas consumption has declined by more than 10% since 1970. Natural gas can, and should, play an increasingly important role in improving overall energy efficiency and making the nation less vulnerable to foreign energy sources. By reducing emissions of sulfur oxides,

nitrogen oxide, carbon monoxide and particulate matter, greater use of natural gas can also enhance the quality of our environment.

- LL&E believes in the ability of this industry to find and develop supplies of natural gas that justify the nation's reliance on it as a key energy source. As shown by the fact that domestic reserve/production ratios have increased in the past decade and surplus deliverability continues to exist, our industry continues to find and develop reserves of natural gas in substantial quantities. With proper incentives, there is every reason to believe that such performance can be duplicated in the future. Proper incentives do not include gas prices at the current \$8 per barrel equivalent, however.
- LL&E also supports the efforts of proposed legislation to increase the efficiency of the transportation of natural gas from the wellhead to the consumer. The elimination of price controls at the wellhead have brought competition and efficiency (sometimes painfully) to the producer. The industry needs similar advances in the transportation and distribution network. During 1989, 60 cents of every consumer dollar went to the transportation and distribution companies while only 40 cents went to producers. We believe that there is room for significant reduction in the overall cost of transportation in this mix.
- Generally LL&E believes in making it easier to construct

new natural gas facilities. New pipelines mean more competition, and more competition and efficiency in the distribution network means smaller differentials between prices at the wellhead and prices at the burnertip.

A smaller differential between producer prices and consumer prices does not necessarily mean producers will receive more for their gas, nor does it necessarily mean consumers will pay less. What it will mean is that the proper market price signals will be more apparent to both producers and consumers, and that natural gas will finally be able to take its proper place in the energy mix of the country.

- LL&E is opposed to the government mandating the use of any particular fuel. The competitive marketplace, not legislative action, should determine the proper mix of energy sources for the nation. We believe the availability, relatively low price and environmental advantages of natural gas will make it the fuel of choice for many users, if only the disincentives and barriers to its free use and availability can be eliminated.

Thus, LL&E strongly supports the underlying objectives of Title X of the National Energy Security Act of 1991 (S.341), i.e., encouraging increased utilization of natural gas and removing those restrictions and barriers that prevent more Americans from experiencing the advantages of using natural gas.

COMMENTS ON SPECIFIC PROVISIONS OF TITLE X, §.341

Introduction

In general, LL&E believes the legislation pertaining to natural gas should be very focused, providing the needed basic requirements to certify new pipeline construction in an expedited manner. We further support removing obvious impediments to investors developing new projects by not subjecting them to unneeded regulatory oversight under the Natural Gas Act, with the provision that investors (who may be, but are not restricted to, existing interstate pipelines) are at risk for their investments.

We would urge some caution about legislation that only focuses on getting more pipe into the ground without ensuring, through compliance with at-risk requirements, that the costs of the new pipe are subject to competitive forces. If regulatory oversight is to be limited, the risks of this new construction must be borne by investors and not by existing ratepayers or producers who are unable to avoid these costs by seeking alternative transportation of their gas.

The legislation we would like to see enacted should meet the following basic objectives:

- Allow anyone, not just existing interstate pipelines, to construct new facilities;
- If investors are willing to take the risks, do not require them to become natural gas companies solely for the purposes of pursuing the new investment opportunity;

- Trust market forces and provide negotiation to establish the proper rates and the proper allocation of risks between the investors and the willing customers of these new at-risk facilities;
- Limit intervention to establishment of standards of conduct and rules to preserve competition among potential operators and shippers on new facilities;
- Establish clear procedures for investors to follow to comply with environmental laws and regulation which protect the property rights of the public without causing undue delay.

Comments on Specific Provisions

1. Optional Procedures for Construction of At-Risk Facilities

LL&E believes that all at-risk construction should be deemed to meet the public convenience and necessity standard of the Natural Gas Act. Applicants who wish to construct new at-risk facilities should be able to choose among procedures: selecting either a procedure which does not require prior certification; or a procedure which provides an expedited pre-construction certification. The latter option should provide for the right of eminent domain, require a NEPA review process and allow for limited intervention primarily in cases of environmental or anti-competitive objections. In both cases, rates would be established through private negotiation between the owner of the facility and prospective shippers, and the

facilities would be open access. Eminent domain and NEPA review should be excluded from the non-certificated option.

The right of mandatory interconnect to other interstate open access pipelines with some appropriate limitations is a critical feature of the construction proposal. If this requirement is not included in the legislation, existing interstate pipelines could monopolize virtually all new construction by simply prohibiting new competitors from accessing the majority of mainline transportation facilities in the U.S. The whole intent of increasing competition could be thwarted if connection is not required. Mandatory interconnection would be required if the party seeking the interconnect is an at-risk facility, the new pipeline assumes all direct costs associated with the connection and the interconnect is physically and operationally feasible. Potential users and facility investors should be free to negotiate the rates and other terms and conditions of service. No user is being forced to use these new facilities and investors will not be able to secure financing unless they provide a competitive service to which the users are willing to subscribe. Anti-competitive conduct, undue discrimination or unreasonable denial of access should be the subject of protective remedies and procedures through a complaint procedure before FERC. Any such complaints should be handled on an

expedited basis.

2. Transportation of Natural Gas Under the NGPA.

The existing NGA Section 7(c) certification procedure should be retained to provide an option for those who wish to construct facilities under the traditional approach and obtain authorized rates approved by the FERC as just and reasonable. In particular, such treatment may be appropriate where the new facilities would provide substantial benefits to an existing system.

LL&E supports amendment of NGPA Section 311 to modify the "on behalf of" test. Confusion and overlap between new at-risk facilities and Section 311 construction should be addressed by limiting Section 311 to incidental facilities which help bridge intrastate and interstate markets. Intrastate construction is governed by the state and should remain so.

3. NEPA compliance.

As evidenced by our recent receipt of the EPA Environmental Recognition Award, LL&E is deeply committed to protecting the environment. However, we believe that environmental protection and resource development need not be mutually exclusive. With respect to proposals to better manage the compliance with NEPA, we believe that a consolidated review

requirement would be one of the most significant contributions Congress could make to facilitate the pipeline construction process. As evidenced by the fact that the NEPA review process can often take years to complete, the accumulated effect of environmental legislation, administered by different federal and state agencies, vastly complicates and prolongs the construction process. Consolidation of the oversight process could result in the same level of environmental protection with substantially less delay.

Natural gas pipeline construction is a costly business and the old maxim "time is money" rings particularly true. Under the standard certification process, the costs of construction, including those associated with delay, are paid by the ratepayers. So it is clearly in the public interest to reduce those costs and enable the savings to be passed on to the consumer.

4. Utilization of Rulemaking Procedures.

The FERC has the power to establish rates and charges and issue certificates to initiate or abandon facilities and services by rulemaking. We would support the Senate's confirmation of this authority, but suggest the existence of that authority not be brought into question.

5. Review of Commission Orders.

In general, we would support the proposals to accelerate the process of review at the FERC by setting limits on the time allowed for review, so long as the time limits are reasonable and can be adhered to.

6. Vehicular Natural Gas Jurisdiction.

LL&E supports exemption from Natural Gas Act jurisdiction for entities who wish to engage solely in the sale and distribution of natural gas as a vehicular fuel and who would not be considered natural gas companies under the Act except for these activities. This provision will truly act to enhance competition and promote the development of this potentially significant industry growth segment.

COMMENTS ON NATURAL GAS PROVISIONS IN THE ADMINISTRATION'S
NATIONAL ENERGY STRATEGY

LL&E has already expressed its views on the proposed provisions to expedite the certification and construction of new interstate pipeline facilities.

With respect to the Administration's National Energy Strategy, LL&E believes that certain provisions of the current proposal, particularly those pertaining to the deregulation of pipeline sales services and the elimination of export and import regulation, are

a bit premature.

Until transportation and storage services are adequately unbundled and made available on an equal basis with pipeline sales through the comparability of service requirement, we do not think FERC's regulatory oversight power should be eliminated. Despite open access transportation rules, insufficient availability of comparable transportation services could possibly result in the subtle exertion of monopoly power in certain instances. Similarly, until comparability between domestic and foreign supplies is achieved, LL&E opposes elimination of import/export oversight.

LL&E believes that the proposal to reorganize FERC by making it an administrative body within DOE is problematic. The current adjudicatory role of the FERC cannot be effectively provided by an administrative body. The gas transportation and sales businesses are in transition and the new rules being formulated dramatically affect the profitability of these businesses. In our view, oversight of the evolving transportation policies by a bipartisan commission is a necessary component to insuring fair play.

The DOE has advocated the need for a major new role for natural gas in the nation's use of energy. However the advocacy role and the adjudicatory role should not be combined at this time. The process of certification of new facilities and the resolution of rate reform and comparability of service issues needs to be accelerated. In this critical time for the industry, having to learn how to deal with a new organization can only be counterproductive. Moreover, the difficulty experienced by the

industry at the FERC is not due to the organizational structure per se; it is caused by the laws under which the organization and industry is forced to operate.

OTHER PROVISIONS OF THE PROPOSED LEGISLATION

There are other provisions being offered in legislation and as part of the NES that will affect the natural gas industry:

With regard to the Public Utility Holding Act, we would first like to commend Senator Johnston and others who support the reforms currently being proposed. The intensive regulation of holding companies by the SEC required under PUHCA is so intrusive that potential electric power developers are almost totally discouraged from investing in new facilities. The proposed legislation, which attempts to create a new class of non-utility electric generation facilities by specifically exempting independent power producers from PUHCA, should be a major incentive for investors to develop new projects. This in turn should increase the demand for natural gas in such facilities since gas presents fewer environmental problems, results in lower capital costs and allows for staged installation to avoid initial excess capacity.

LL&E also supports initiatives to expand leasing offshore and in the Arctic National Wildlife Refuge (ANWR). It is extremely

important to realize that one fourth of America's natural gas resources are in the OCS. The ANWR is believed by many experts to be the area of single greatest potential for new oil and natural gas discoveries. The technology clearly exists to strengthen our national security by developing these domestic energy resources while at the same time safeguarding the environment in which they are found.

Senator JOHNSTON. Thank you for an excellent statement, Mr. Steward.

Mr. Kuehn.

**STATEMENT OF RONALD L. KUEHN, JR., CHAIRMAN, PRESIDENT
AND CHIEF EXECUTIVE OFFICER, SONAT INC.**

Mr. KUEHN. Thank you, Mr. Chairman, members of the committee. I am Ron Kuehn. I am chairman, president and chief executive officer of Sonat.

Sonat is involved in every phase of the energy industry. And one of its major subsidiaries, Southern Natural Gas Company is the major pipeline supplier of natural gas to the southeastern United States.

Sonat also has a major business interest in the oil and gas exploration and production business with a company approximately the size of Mr. Steward's. So we understand his problems and concerns, although we do not necessarily share his solutions.

Happenstance would have it that I also happen to be on the board of directors of Union Carbide Corporation, Mr. Graham's company. I disclaim any responsibility for his testimony.

[Laughter.]

Mr. KUEHN. I know we are running short of time, so I will try and be very, very brief in my comments. And let me say, we appreciate the opportunity to testify here today.

Sonat strongly supports the proposals which will go a long way toward reducing delays and expedite the current regulatory review and approval process at FERC. And we think the intent of some of the proposals in title X are constructive, and particularly support the amendments of Senator Bingaman.

In particular, we strongly applaud the efforts in S. 341, as amended by Senator Bingaman to streamline and improve the environmental assessment problem at FERC. And we believe those proposals to reduce the time required to prepare and review environmental impact statements, when coupled with the concept of a phase certificate procedure can be, and should be, very effective in speeding the process.

With respect to the provisions of S. 341 and also the NES regarding section 311, and the modifications to section 7, it is our view that these proposals are so conditioned—or carry with them such rate uncertainties that they will not really offer a meaningful solution to the regulatory delay problem under current section 7 procedures.

Indeed the proposals, if they were enacted, may actually slow the existing section 7(c) approval and review process at the FERC by causing the staff of that agency to have less incentive to speed the process of approval under the current procedures, which carry with them safeguards regarding operating conditions and rate matters.

So I think possibly the new modifications could be counterproductive. And we do not think they are necessary if the streamlining provisions of the proposals are adopted.

While we applaud the streamlining proposals and efforts to expedite the regulatory process, we feel strongly that the proposed amendments to section 4, contained in S. 341, are a major unneces-

sary step backward, as they would inject further rate and financial uncertainty and instability into an industry which has had enough of that recently, as you know, Mr. Chairman.

Moreover, we think those amendments are unnecessary, given the current protection afforded by section 4 and section 5 as they exist.

Let me turn now, as requested, to the proposals in the NES relating to natural gas. I believe that some of the very broad proposals contained in the NES would result in yet another major restructuring of the interstate natural gas transmission industry, with far-reaching and largely-unknown consequences. This restructuring would come at a time as you know, Mr. Chairman, when the industry is still attempting to recover financially from the consequences of the most recent restructuring, and the consequent take-or-pay liabilities you referred to in your opening statement which cost the producer industry, the pipeline industry, and ultimately the consumer, billions of dollars.

Additionally, the FERC has yet to issue new regulations covering all aspects of the new open access regime. Clearly, neither the industry nor the agency which regulates it have had time to digest and assimilate and adjust to the changes we have already just recently experienced.

Therefore, I would urge your committee, and Congress in general, to give the natural gas proposals contained in the NES very serious and thoughtful study, so that before acting on these proposals, you will have a clear and full understanding of all of the consequences on the consuming public, the producing community, and the stability reliability and financial viability of the interstate natural gas transmission industry.

I will conclude by referring to a statement in the forward of the executive summary of the NES which says, in essence, regulation and Government intervention are extremely blunt tools that always impose unforeseen costs. Therefore, Government intervention must be justified by a rigorous cost-benefit analysis.

I respectfully submit, Mr. Chairman, that that analysis has not been completed at this time. And we ought to be very cautious in moving forward to further restructure this industry in a major way.

Thank you very much for your attention.

[The prepared statement of Mr. Kuehn follows:]

Testimony of Ronald L. Kuehn, Jr.
 Chairman, President & CEO
 Sonat Inc.
 before the
 Senate Committee on Energy and Natural Resources
 United States Senate
 March 7, 1991

Mr. Chairman, Members of the Committee:

I am Ronald L. Kuehn, Jr. and I am the Chairman, President and Chief Executive Officer of Sonat Inc. I am also Vice Chairman of INGAA, the Interstate Natural Gas Association of America. Sonat is involved in every phase of the energy industry. Its interstate pipeline subsidiary, Southern Natural Gas Company, is the major pipeline supplier of natural gas in the southeastern United States, serving Alabama, Georgia, Mississippi, South Carolina and Florida. Sonat also has major businesses involved in oil and gas exploration and production and oil field contract drilling and other services.

All of my comments do not necessarily reflect the position of INGAA since, in some cases, INGAA has not yet had time to formulate an industry position. I will make it clear where my views reflect the INGAA position.

SUMMARY

Sonat and the interstate natural gas pipeline industry welcome the opportunity to address the subject of a new national energy policy which would have a major impact on the energy industry. We appreciate your leadership, Mr. Chairman, and that of Senator Wallop, as your legislative proposals will set the stage for a national debate on energy policy.

You have asked me to comment on how the proposed legislative reforms in Title X of S.341 would affect interstate natural gas pipelines, and separately, Senator Bingaman has asked me to comment on his proposed amendments. I have also been asked to address the natural gas initiatives in the proposed National Energy Strategy (NES).

INGAA and the industry strongly support proposals which will reduce delays and expedite the current regulatory review and approval process. We believe that the intent of the initiatives proposed in Title X are constructive, and we particularly support the amendments proposed by Senator Bingaman.

INGAA and the industry strongly support the efforts in the S.341 proposal--as amended by Senator Bingaman--to streamline and improve the environmental assessment process at the FERC. We believe the proposal to reduce the time required to prepare and review environmental impact statements through the use of third party contractors chosen and funded by the applicant from an FERC

approved list of third party contractors will be effective.

INGAA has not yet formulated an industry position on the proposals in S.341 or the NES with respect to clarification or modification of Section 311 and Section 7 construction procedures, but it is Sonat's view that these proposals are so conditioned (incremental rates, no federal eminent domain), or carry with them such rate uncertainties that they will not offer a meaningful solution to the regulatory delay problem under current Section 7 procedures. Indeed, the proposals, if enacted, may actually slow the Section 7(c) approval and review process at the FERC by causing the staff of that agency to have less incentive to speed the process of approval under the current Section 7 process--with all its requirements regarding conditions and rate treatment prior to construction--because of the availability of the proposed Section 311 and Section 7 modifications contained in S.341 and the NES. Finally on this point, I do not believe these modifications are necessary if some of the other streamlining proposals--particularly as they are related to the environmental review process--are adopted.

While INGAA, the industry and Sonat applaud and encourage your efforts to streamline and expedite the regulatory approval process, subject to the concerns expressed, we feel strongly that the proposed amendments to Section 4 contained in S.341 are a major and unnecessary step backward as they would inject further rate and financial uncertainty and instability into an industry which has had to pay higher costs to attract capital because of the already uncertain, and at times unfavorable, financial environment in which we currently operate. Moreover, such amendments are totally unnecessary given the current protection already afforded by Section 4 and Section 5.

Before commenting further on the proposals of the NES, I would like to comment briefly on some other proposals contained in S.341. INGAA supports reform of the Public Utility Holding Company Act, as proposed, and encourages the proposals which will facilitate the use of alternate fuels in vehicles. We also support the expanded research and development program for natural gas and strongly support all new efforts to quickly develop this country's natural resources in order to lessen the economic impact and political uncertainty inherent in the reliance on foreign sourced natural resources.

I would like to conclude this portion of my testimony with some comments directed toward the proposals contained in the NES relating to the natural gas industry not already mentioned above. I believe that some of the very broad proposals contained in the NES would result in yet another major restructuring of the interstate natural gas transmission industry with far-reaching and largely unknown consequences. This restructuring would come at a

time when the industry is still attempting to recover financially from the consequences of the most recent restructuring to "open access" transportation and the consequent take-or-pay liabilities which cost the producer industry, the pipeline industry, and, ultimately, the consumer billions of dollars. Additionally, the FERC has yet to issue new regulations covering all aspects of the new "open access" regime. Clearly, neither the industry, nor the agencies which regulate it, have had time to digest and assimilate the changes we have already experienced. Therefore, I would urge this committee and the Congress in general to give the natural gas proposals contained in the NES very serious and thoughtful study so that before acting on these proposals, you will have a clear and full understanding of all the consequences on the consuming public, the producing community, and the stability, reliability and financial viability of the interstate natural gas transmission industry. Indeed, many of the restructuring proposals contained in the NES relating to the natural gas industry will be the subject of an FERC Notice of Proposed Rulemaking where all of these issues will be fully evaluated. I believe that prudence should dictate that no action be taken to further restructure the pipeline industry until all these issues are fully and thoughtfully evaluated.

I would now like to comment more specifically on the proposals in Title X of S.341.

SPECIFIC STREAMLINING PROPOSALS

We generally support the amendments introduced by Senator Bingaman on February 28 and the objectives of the streamlining proposals contained in S.341.

No one questions that the FERC has important responsibilities under the National Environmental Policy Act (NEPA). But, the environmental process employed by the Commission in conjunction with its responsibility to issue pipeline certificates can be streamlined with or without legislation in order to expedite the certificate process while still fulfilling the Act's substantive goals. Other federal departments and agencies, including the Department of Energy, have developed procedures removing some of the regulatory roadblocks while remaining consistent with NEPA and Council on Environmental Quality (CEQ) guidelines. These concepts can be applied to the FERC process.

Improving the Environmental Assessments (EA) Process. We support the amendment proposed by Senator Bingaman improving the environmental assessment process. Most applications require only an EA, not an EIS. Yet, in recent certificate proceedings, the FERC has indicated that the information it required to prepare the EA was as comprehensive as that which is typically used in the preparation of an EIS. This is inconsistent with Part 380 of the

FERC's own regulations, where the distinction is clearly made. An EA should be a "concise public document" which provides sufficient evidence and analysis to determine whether an impact statement is necessary or that there is no significant impact. Under NEPA, an EIS requires much more. Because the Commission does not differentiate between the two, companies must prepare and submit far more data than is necessary to satisfy the environmental assessment requirements established by CEQ regulations.

Expediting the Preparation of EISs. We strongly support the provisions of S.341 as modified by the Bingaman amendments that allow pipelines to utilize the so-called "3rd party contractor" approach to EIS preparation. These reforms should reduce the time required to prepare the EIS. Under this approach, the Commission would maintain a list of environmental contractors qualified to prepare the necessary environmental reviews associated with FERC consideration of applications. An applicant could then retain one of these contractors, perhaps even before its application is filed, minimizing the time required for the environmental review by the Commission.

The language, as written in S.341, allows the contractor to be chosen "by the Commission in its sole discretion." The amendment by Senator Bingaman modifies the provision to allow the applicant to choose the contractor. This refinement improves the provision in at least two ways. First, applicants will have an incentive to choose a contractor that has a track record of completing environmental reviews in a complete and timely manner. Thus, contractors would have an incentive to compete for those contracts. Over time, this should improve the environmental review process and minimize costs. Secondly, an applicant might wish to choose a particular contractor because it had recently completed an environmental impact statement on a similar type of facility or on a project in a similar geographic area, and thus could draw on that experience.

Nonjurisdictional Facilities. Clearly directing the FERC to limit its review to those facilities over which it actually has jurisdiction would be a major improvement in the Commission's process. The amendment on this subject by Senator Bingaman recognizes the need to streamline the FERC process by avoiding inappropriately broad environmental reviews involving facilities over which the Commission has no control or responsibility. These nonjurisdictional facilities would still be subject to state and federal environmental regulations.

Limitation on Rehearing Process and Shortened Period for Appeal. Sonat applauds efforts to speed the rehearing process. However we do not think that there is anything fundamentally wrong with current law. FERC currently has thirty days to respond to a petition for rehearing or it is deemed denied. The problem is that

FERC has fallen into the habit of issuing "tolling orders," sidestepping its statutory obligation to take timely action. We would rather eliminate the ability to issue tolling orders (and return to the original intent of the act) than having to resort to legislative solutions which could result in unnecessary legal appeals to the circuit court and duplicitous legal proceedings at FERC (which would unnecessarily burden the applicant and FERC staff).

Approval of Unopposed Applications. The amendment proposed by Senator Bingaman for automatic approval of unopposed applications would reduce the Commission's case load while expediting these noncontroversial filings. Natural gas companies make many certificate filings under Section 7(c) of the NGA of a minor and noncontroversial nature to add taps, interconnections, etc. These applications can linger untouched at the Commission for months after the notice period awaiting routine approval.

Other applications are subject to routine nuisance objections that needlessly slow the proceeding. An adjunct to this amendment is the requirement that FERC institute a procedure to identify and quickly resolve such nuisance objections. Implementation of these reforms would have to be consistent with the phased certificate procedures.

Conclusive Evidence of Need. This amendment by Senator Bingaman regarding demonstration of need for proposed facilities specifically addresses the problem of nuisance objections where a pipeline already has contracted commitments for the capacity. We fully support the Senator's approach.

Repair and Replacement of Facilities. We have concerns over a recent interim rule wherein the FERC would for the first time exercise environmental review over the routine pipeline replacement and repair projects under Section 2.55(b) of its regulations. We are especially concerned about the requirement that the FERC be notified at least 30 days before the work begins. Approximately 700 miles of pipe are replaced or abandoned each year by the pipeline industry, and this essential work must be done on a timely basis, as allowed under existing regulations, to assure the safe and efficient operation of the nation's pipeline system. At best, the prior notice procedure will result in roadblocks that prevent or unnecessarily delay these changes. Moreover, we are concerned that the initiation of such a procedure for routine repair and replacement activities will direct limited staff resources away from more significant projects where environmental reviews are justified. Sonat fully supports Senator Bingaman's amendment addressing this problem.

Phased Certificate Procedures. Sonat believes the concept of "phasing" as developed by the FERC is a positive step. However,

since questions have been raised about FERC's authority to implement such a policy under current law, the amendment should be adopted.

Priority Projects. In past years, the natural gas industry supported the creation of an Energy Mobilization Board to speed the regulatory consideration of important energy projects. Sonat supports the amendment offered by Senator Bingaman applying the "fast track" concept to natural gas projects.

FERC Lead Agency of Environmental Impact Statements (EISs) and Environmental Documents. FERC should not be automatically designated the lead agency for all "environmental documents." This will make the approval process more complex than it is currently.

Taken together, this package of streamlining proposals will help to speed the regulatory approval process, and should therefore be adopted.

Optional Construction and Transportation Procedures. INGAA has not adopted a position on this proposal. I believe, however, that the optional Section 7 procedure of S.341 will not encourage in a meaningful way any significant additional pipeline construction because of the requirement of incremental rates which would be an economic barrier in a great many cases. Additionally, a pipeline using this option must accept a certificate after construction upon commencement of service irrespective of the conditions imposed in that certificate. Thus, under this option, a pipeline company would be placed in the untenable position of making a significant capital investment without knowing the conditions under which it could operate and without knowing if its investment and a just and reasonable return on that investment can be achieved. The availability of this option, as conditioned, would not incentivize Sonat to make any meaningful pipeline construction investments.

-I also believe that the availability of this option could result in further delays under the traditional Section 7 procedures by causing the FERC to have less incentive to speed review and approval under the current statutory framework. In the past, controversy has arisen as to whether the FERC would even approve a Section 7 application when new alternative authorization procedures were made available. For example, FERC sought to force pipelines to accept its open access transportation program by initially refusing to allow pipelines to use Section 7(c) for individual transportation arrangements. I am concerned that the FERC may similarly try to introduce adverse rate conditions through such an optional certificate mechanism and force them on pipelines by again refusing to allow pipelines the use of Section 7(c).

With respect to the Section 311 proposals of S.341, the

current rate uncertainties, fortified by recent FERC action with respect to two significant Section 311 pipeline projects, casts real doubt on whether proposals would have a meaningful positive impact.

CHANGES TO RATEMAKING PROCEDURES

Sonat and the pipeline industry oppose Section 10004 of S.341 in the strongest possible terms and urges that this provision be deleted. On the surface, Section 10004 merely amends NGA Section 4(e) to apply to rate "changes" rather than just rate increases. The impact of this modification, however, would have the perverse effect of discouraging pipelines from filing for rate decreases. To understand this ramification, it is necessary to appreciate the traditional treatment of pipeline rates under Section 4 of the NGA.

The existing statutory and case law construction of Section 4 of the NGA may be characterized by the following statements.

1. When a pipeline proposes increased rates pursuant to Section 4, the preexisting lawful rate provides a refund floor, below which the Commission may not require the pipeline to make refunds.

2. When a pipeline proposes decreased rates pursuant to Section 4, refunds may not be ordered by the FERC, even if the rate ultimately is less than the filed rate.

Taken together, these principles prohibit retroactive ratemaking, guaranteeing that a reduction from a previously approved, just and reasonable rate can be implemented prospectively only. A rate approved by the Commission is deemed just and reasonable until a new rate is approved. A retroactive rate change, either an increase or a decrease, to a rate previously found to be just and reasonable results in rate uncertainty and clearly is not in the public interest. Clearly, the uncertainties attendant to the changes and rates which can never be viewed as "final" will seriously inhibit the ability of producers, pipelines, brokers and local distribution companies to market gas.

As drafted, Section 10004 effectively removes the previous just and reasonable rate as the benchmark against which any revision to the newly filed rate is calculated. Thus, pipelines would be exposed to a theoretically unlimited refund obligation. Also, the Commission would have the authority to require the pipeline to furnish a bond large enough to refund down to a zero rate. Currently, the size of the bond is limited by the size of the rate increase.

Exposed to the possibility of unlimited refund exposure and being required to furnish extraordinarily large bonds for an

indefinite period of time, pipelines would be discouraged from filing rate changes at all. This disincentive to file for a rate change, even a decrease, is clearly not in the public interest. In summary, the amendments of Section 4 would have serious adverse consequences for producers, pipelines and their customers and should be deleted from the bill.

THE NATIONAL ENERGY STRATEGY

The National Energy Strategy (NES), as enunciated by the Administration, is intended to place a heavy emphasis on the role of natural gas in displacing imported oil and providing for the use of environmentally cleaner energy sources. One of the goals contained in the natural gas section of the NES is to encourage the efficient production of natural gas in an environmentally sound manner. A second goal is to "establish a more efficient, accessible natural gas transportation and distribution system." There are a number of specific proposed measures which address these goals. The language asserts that the NES will remove regulation except where necessary to protect consumers, while enabling all segments of the industry to expand by taking advantage of market opportunities.

I would like to suggest that although the overall goals and objectives of the NES are good, there are some serious problems with the approaches to attaining these goals. In fact, a number of specific approaches contained in the NES will, in my opinion, inhibit a more efficient, accessible natural gas transportation and distribution system, and inhibit the efficient production and consumption of natural gas in an environmentally sound manner.

The NES states that "the goal of regulation should be to protect consumers and shippers without promoting rigidity and that prevents efficient adjustment to all parties to changing economic circumstances." [Emphasis added] The protection of consumers is a basic principle underlying the fundamental body of law of the interstate natural gas pipeline industry. The Natural Gas Act of 1938, the regulations of the FERC and legal precedent have been developed on well-grounded constitutional principles toward these ends. The National Energy Strategy should not encompass means to achieve an end which have been achieved continuously since 1938 under existing legislation.

The NES states that the current regulatory policies and statutory requirements unnecessarily discourage the use of natural gas and actually inhibit competition. I believe that most of the regulatory policies and practices which may unnecessarily discourage the use of natural gas, and inhibit the efficient transportation and distribution of natural gas, can be corrected at the regulatory level without legislation. We would certainly support the broad natural gas goals of the NES. However, some of

the actual proposals contained in the NES would totally restructure this important pipeline segment.

Please consider what this industry has experienced in recent history which I recited earlier. This industry is still trying to recover from the financial "blood bath" of the take-or-pay crisis and the destruction of the historic relationships with producers and distributors. This revolution, implemented through FERC Order Nos. 436, 500, 451, and other experimental regulatory procedures, did not consider the financial viability and long-term stability of the interstate natural gas pipeline industry. I would urge you today to take time to study the effects of these proposals and the impacts that they will have on this critical segment of industry before you rush to act. We cannot stand the start-up of yet another major restructuring while we are still trying to emerge from the last one. Indeed, I must say that new restructuring without careful investigation and consideration of impact would appear to be irresponsible, particularly in light of the fact that the FERC itself will be fully evaluating many of the NES proposals in soon to be released Notice of Proposed Rulemakings. I would urge you to not adopt some of the new measures contained in the NES without a great deal more information as to the consequences of such action, but I would encourage you to assist in the implementation of changes at the FERC under existing laws that will encourage more expeditious and efficient action.

CONCLUSIONS

In conclusion, we support the overall natural gas goals of the NES. We believe that this country should do all that it can to encourage the efficient production of natural gas in an environmentally sound manner and establish a more efficient, accessible natural gas transportation and distribution system. However, the means by which we establish a more efficient and accessible natural gas transportation and distribution system are critical. The provisions of the NES that deal with expedited construction, deregulation of pipeline sales rates, reform of natural gas pipeline rate design, and access to natural gas pipeline transportation services will not, in my opinion, accomplish the goals of the NES. They will, however, have the effect of further disrupting the only system and means by which we have of transporting natural gas. This disruption could potentially manifest itself in the reliability of pipeline services and increased financial burdens on the ultimate gas consumer.

I would point out to you that by far the greatest growth in the natural gas pipeline industry occurred from the late 1940's through the early 1960's, a period of great regulatory stability. I would urge you to give the industry a chance to accomplish your goals by streamlining, not restructuring.

Senator JOHNSTON. Thank you very much, Mr. Kuehn.
Mr. Catell.

**STATEMENT OF ROBERT B. CATELL, PRESIDENT AND CHIEF
OPERATING OFFICER, BROOKLYN UNION GAS CO.**

Mr. CATELL. Thank you, Mr. Chairman.

My name is Robert B. Catell. And I am the president and chief operating officer of the Brooklyn Union Gas Company, a local distribution company serving over 1 million customers in the New York metropolitan area.

I believe that being an LDC in the northeast makes it particularly appropriate that I have an opportunity to comment on the proposed legislation, which will expedite pipelines construction, encourage the expanded use of natural gas, and reduce our dependence on imported oil.

I want to note that I serve on several committees of the American Gas Association, including the board of directors, and that the AGA—representing 250 local distribution and transmission companies—is in the process of developing a position on S. 341, to be filed with the committee, after its board meeting on March 14.

We are also a member of the Associated Gas Distributors who will be submitting comments on the proposed legislation. But I am here today to testify on behalf of Brooklyn Union.

I am pleased to be here with you today to present the views of a local distribution company on the natural gas title of the National Energy Security Act of 1991, S. 341. Let me say that we are very pleased with the direction and intent of the provisions of title X of the act. The act implicitly recognizes the key role that natural gas can play in a balanced energy strategy. And the distribution segment of the industry is prepared to do what it can to fill that role and bring about a more efficient and competitive system for delivering adequate and reliable natural gas service to consumers.

I have submitted a detailed written statement of our views on the act and Senator Bingaman's amendments, and will summarize a few of the more important points here this morning.

I would also appreciate the opportunities to submit additional written comments for the committee's hearing record, after we have further analyzed S. 341, the administration's bill, and other proposals.

As to my remarks today, let me state that we strongly support your initiatives to expedite and streamline the present regulatory process for the construction of new pipeline capacity. Despite recent efforts by the Federal Energy Regulatory Commission, new pipeline projects still face a daunting and stifling array of regulatory hurdles, which unnecessarily delay development of needed capacity to bring natural gas to the retail marketplace.

I know first-hand from doing business in the northeast, that the natural gas regulatory process must be improved. We need new pipeline capacity to satisfy growing market demand. Yet our experience with the Iroquois project illustrates the regulatory delay and difficulties in achieving that new capacity in a reasonable time frame.

S. 341 streamlines the traditional procedures, and provides an alternative to those procedures, though constructing new pipeline facilities. As such, it represents a major step in the right direction.

We recognize that any system for expediting the FERC regulatory process must also be balanced and accommodate the legitimate interests of those who may be adversely affected. As a result, we suggest that pipeline facilities to be constructed under the non-certificate option, be subject to some reasonable, limited opportunity for notice, and protest by affected third parties—as appropriate—prior to construction of those facilities.

The notice procedure would ensure awareness of the construction by all interested parties. Protests would be restricted to issues related to impairment or degradation of service to existing customers, and subsidization of the new service by third parties. These protests would be raised within a fixed, limited time period, and resolved quickly by the Commission.

Similar care should be taken to assure that section 311 facilities and services are subject to procedures for resolving these kinds of issues before-the-fact, as well. We also suggest that the new optional procedures be available for facilities constructed for sales of gas, as well as for transportation of gas.

Several other provisions of title X deal with expediting, Commission decision-making, and court review. These include deadlines for action on rehearing applications; a shorter time period in which to seek court review; third-party contracting on environmental documents; and revisions to section 4 of the Gas Act, to facilitate more equitable processing of pipeline rate case.

We support these initiatives and the amendments offered by Senator Bingaman, and encourage you to retain and adopt them in the legislation.

One issue not addressed by title X is the pre-granted abandonment of pipeline capacity. As you are aware, service degradation is a very important issue to a local distribution company. Our concern is that current regulations provide for pre-granted abandonment of transportation service by pipelines, at the expiration of the contract term.

This pre-granted abandonment authority threatens the pipeline capacity essential to a local distribution company to meet its service obligations to firm customers. Additionally, it is clear that a more intensive R&D effort to develop natural gas end use technologies, our natural gas supplies, would enable the Nation to reduce its dependence on imported oil, and improve the quality of the environment.

Brooklyn Union conducts its own R&D program in an effort to stimulate the direct use of natural gas in such developing markets as co-generation, gas air conditioning, and natural gas vehicles. Natural gas engine research is a very promising strategy, both to reduce air emissions and our dependence on imported oil.

We strongly support the vehicular natural gas portion of title X. Natural gas powered vehicles represent an efficient, direct use of gas, and can make a substantial contribution to improving the environment, while simultaneously backing-out oil imports.

We are very pleased that S. 341 clarifies Federal jurisdiction in this area in a way which will facilitate development of this important new market.

To assist in the necessary development of end-use technologies, Brooklyn Union, along with the American Gas Association, the Gas Research Institute, Institute of Technology, Southern California Gas, and Columbia Gas System, submitted to the Department of Energy strategies and recommendations for natural gas-related research and development.

Those recommendations call for the Energy Department to undertake a 10-year, \$2.5 billion natural gas R&D program to augment planned industry expenditures. We hope you will give those recommendations serious consideration in your deliberations. We strongly believe that a DOE R&D effort of this magnitude is necessary and proper, a proper component of a comprehensive energy strategy.

In closing, let me say that we are very encouraged by this committee's attention to streamlining, enhancing, and enhancing the Federal regulatory process as it pertains to natural gas. As I am sure you are aware, local distribution companies such as Brooklyn Union are highly regulated at the State level. We hope that State regulatory commissions, too, can be encouraged to examine their procedures as you have here, in order to remove any impediments to the use of natural gas in meeting our national energy goals.

Thank you for this opportunity to present our views on S. 341.
[The prepared statement of Mr. Catell follows:]

The Brooklyn Union Gas Company

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BROOKLYN, NEW YORK 11201

PREPARED TESTIMONY OF

ROBERT B. CATELL

President & Chief Operating Officer

THE BROOKLYN UNION GAS COMPANY

Before the

UNITED STATES SENATE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

on S. 341 --

NATIONAL ENERGY SECURITY ACT OF 1991

March 7, 1991

The Brooklyn Union Gas Company

INTRODUCTION

The Brooklyn Union Gas Company is a diversified energy company headquartered in Brooklyn, New York. Our principal business is retail natural gas distribution to a population of over four million people in three of New York City's five boroughs; Brooklyn, Queens, and Staten Island. We serve over one million residential and small commercial customers who depend on Brooklyn Union for firm, reliable service. We are also developing markets for new business, spurred by advances in cogeneration, gas air conditioning, natural gas vehicles and solid waste disposal.

Brooklyn Union has been actively involved in the development of energy policy for some time and has taken several initiatives, on our own and with others, such as the Associated Gas Distributors, and the American Gas Association, to shape both national and state agendas to enhance energy security and improve the environment. We outlined and published a series of actions that could lead to significant progress in achieving economic, environmental and energy goals, and we commented extensively on both the National Energy Strategy prepared by the U.S. Department of Energy, the draft New York State Energy Plan and its recent update.

This testimony today is provided to assist the Committee on Energy and Natural Resources in its consideration of the National Energy Security Act of 1991. I will address Title X of that Act,

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covering natural gas regulatory issues, Sections 6003, 6004 and 6005 of Title VI, covering natural gas research, development, demonstration and commercialization activities and a series of amendments to the Act offered by Senator Bingaman.

SUMMARY

Streamlining the Regulatory Process

Brooklyn Union has firsthand experience from its location in the Northeast that the natural gas regulatory process must be streamlined. Our region of the country has long been in need of new natural gas pipeline capacity. This new capacity is necessary to satisfy anticipated growth in energy demand as well as to reduce our dependence on imported oil and improve the quality of the environment. The Iroquois Gas Transmission System project, which took almost five years to obtain regulatory approval, is a clear example that the process must be expedited. In fact, at an early stage in the regulatory process, Iroquois sought to make use of the optional expedited certificate procedure at FERC and filed such an application. The provisions in S. 341 on this subject, and Senator Bingaman's amendments represent a necessary and proper response to the current burdensome regulatory process and, with minor modification, should be adopted.

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Stimulating NGV Commercialization

The vehicular natural gas provisions of S. 341 are necessary clarifications to existing law concerning federal and state regulatory jurisdiction. Beyond this, however, more could be done to facilitate the commercialization of natural gas vehicles (NGVs). The transportation sector accounts for about 60 percent of total U.S. petroleum demand and about 65 percent of U.S. air emissions. NGVs can play a significant role in reducing our reliance on imported oil while simultaneously improving air quality. We urge the Committee to encourage further commercialization of NGVs through more rapid and extensive federal and private sector fleet and mass transit use of natural gas vehicles.

Supporting Natural Gas RD&D

Government support to encourage the development of natural gas end-use technologies and natural gas supplies would enable the U.S. to reduce dependency on imported oil and improve the quality of the environment. Brooklyn Union has conducted its own RD&D program in an effort to promote the direct use of natural gas in such developing markets as cogeneration, gas air conditioning and natural gas vehicles. To assist the necessary development of these end-use technologies, Brooklyn Union, along with the American Gas Association, Gas Research Institute, Institute of Gas Technology, Southern California Gas Company and Columbia Gas System, submitted strategies and recommendations for natural gas

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related research and development to the Department of Energy. These recommendations call for the Department of Energy to undertake a long-term (ten-year) natural gas RD&D program funded at \$2.5 billion to augment the planned industry funding. The Committee should incorporate these recommendations into the appropriate DOE authorization legislation.

DETAILED COMMENTS

Streamlining the Regulatory Process

1. Optional Procedures -- § 10001. Brooklyn Union generally supports this provision of S. 341 which, as an alternative to existing Natural Gas Act (NGA) and Natural Gas Policy Act (NGPA) authorities, allows for the construction of facilities for the transportation of gas without prior Federal Energy Regulatory Commission (FERC or Commission) approval so long as some limited opportunity is provided to impacted third parties to raise legitimate concerns. We also suggest the following revisions: (1) that it be expanded to include facilities constructed for the sales, as well as transportation, of gas; and (2) that noncertificate construction option facilities be subject to some reasonable, limited opportunity for notice and protest as appropriate prior to construction of those facilities. The notice procedure

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would ensure awareness of the construction by all interested parties. Protests would be restricted to issues related to impairment or degradation of service to existing customers and subsidization of the new service by third parties. These protests would be raised within a fixed, limited period and resolved quickly by the Commission.

2. NGPA § 311 Transportation -- § 10002. NGPA § 311 was originally intended as a mechanism to integrate the pre-1978 interstate and intrastate gas markets by allowing interstate pipelines to transport gas "on behalf of" local distribution companies (LDC) and intrastate pipelines without obtaining a certificate under NGA § 7. Section 10002 would revise § 311 to allow such transportation on behalf of any person. Brooklyn Union generally supports this revision to § 311 as a means of enhancing the competitive market for gas supplies. Experience has shown, however, that § 311 service can have adverse impacts on parties not directly involved in the particular 311 transaction at hand. Beyond the "bypass" issue raised by many LDCs, oversubscription of interstate pipeline capacity and increased costs to third parties can result. Accordingly, we suggest that § 10002 be modified to include an expedited prior notice and protest procedure whereby issues of this sort can be resolved in a timely manner by the Commission.

3. NEPA Compliance -- § 10003. We support designating FERC as the lead agency for purposes of National Environmental Policy

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Act (NEPA) compliance and authorizing FERC to set time limits for other federal agencies to complete their reviews. These revisions reasonably streamline the NEPA compliance process and should facilitate decision-making and eliminate duplication. We also support the use of contractors paid for by the applicant to prepare necessary environmental documents. This should further expedite the environmental review process by minimizing scheduling and resource (e.g., cost) constraints.

4. Rates and Charges -- § 10004. The first revision proposed to NGA § 4 should operate to facilitate better analyses of pipeline rate filings by providing an additional 30-day period for review by the Commission and interested parties. The second revision to § 4 properly clarifies the application of the section to any rate changes, that is, increases or decreases, and assures that the burden of proof as to such changes remains with the pipeline. Brooklyn Union supports these modifications to NGA § 4.

5. Rulemaking Procedures -- § 10005. The Commission's legal power to issue certificates and authorize abandonment of facilities and services by rulemaking appears fairly well established under present law. So long as the public convenience and necessity standard remains the substantive test for such Commission actions, proceeding by rulemaking may be appropriate to establish ground rules of general applicability.

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6. Rehearing and Court Review -- § 10006. These amendments to the NGA and NGPA would establish a time certain for Commission action on rehearing applications, shorten the time period for seeking court review of Commission orders and streamline the initial procedural aspects of court review relating to service of a petition for review and specification of grounds for the petition. Brooklyn Union supports these revisions to the rehearing and court review processes because they expedite the issuance of final, appealable orders, as well as any attendant court review, and thereby hasten the ultimate finality of the legal process which is essential to sound gas supply planning and project financing.

7. Limited Antitrust Relief -- § 10007. We support this provision of limited antitrust relief for independent producer cooperatives as a reasonable measure to mitigate legal risk and thus make it easier for such producers to pool or aggregate their natural gas production into more readily marketable increments of gas supply. So long as the purposes of such cooperatives are not to raise prices and the anticompetitive effects do not substantially outweigh the procompetitive effects, as § 10007 provides, this section should reduce a significant, potential legal exposure to the formation of viable new supply sources for LDCs and others. Given the definition of "independent producer," that is, production at or below 6 million cubic feet per day, we would also urge the Committee to reconsider the exclusion of pipeline and LDC affiliates on grounds that it is not necessarily any easier for those affiliates to market smaller increments of gas supply than

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nonaffiliated producers. The policy "cutoff" should properly be size of production, not corporate relationship and limitations may preclude sales to affiliates, if that is a concern.

Stimulating NGV Commercialization

Brooklyn Union has been, and continues to be, a leader in the commercialization of NGVs. Substantial growth in natural gas use in the transportation sector through NGVs can simultaneously provide cleaner air, reduced reliance on imported oil, reduced balance of payments and efficient energy utilization. The benefits of NGVs to the Nation are compelling.

Section 10008 of S. 341 will facilitate the commercialization of NGVs by clarifying the nonfederal jurisdictional status of LDCs which enter the NGV business as wholesalers of vehicular natural gas (VNG) or as retailers. The technical legal risk of federal jurisdiction should not be allowed to inhibit in any way the development of the VNG market. Brooklyn Union supports § 10008 and urges its early enactment.

Given the clear societal benefits to the commercialization of NGVs, we also suggest that the Committee consider other mechanisms for promoting alternative fuels. Federal government leadership by example in this area could be quite useful. Federal fleet use of alternative fuel vehicles could be increased, and private sector fleet and mass transit (as in § 11101 of S. 341) use should be

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promoted through federal initiatives. The maturing NGV industry is poised to make a serious contribution to the Nation's energy and environmental betterment. Now is the time to remove institutional barriers, as S 10008 does, and provide further incentives to maximize that contribution.

Supporting Natural Gas RD&D

As previously mentioned, Brooklyn Union has long-supported natural gas research, development, demonstration and commercialization efforts both as to direct end-use and supply enhancement technologies. We are, accordingly, very pleased with the general structure of §§ 6003, 6004 and 6005 of S. 341 regarding development and commercialization of natural gas end-use technologies, RD&D to enhance gas supplies, and a RD&D and commercialization program on high efficiency heat engines. These authorizations are largely in line with the recommendations developed in September of last year by Brooklyn Union, the American Gas Association, the Gas Research Institute, the Institute of Gas Technology, Southern California Gas Company and Columbia Gas System, Inc.

The societal benefits to be obtained from greater use of natural gas are clear. We hope that you will make every effort yourselves and with your colleagues on the Committee on Appropriations to assure that the authorized RD&D activity in S. 341 is fully funded and specifically dedicated to the programs designated in S. 341.

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Senator Bingaman's Amendments

By letter dated February 28, 1991, Senator Bingaman requested comments on a series of amendments to Title X of S. 341 which would streamline the traditional NGA § 7 certificate process. While we support, as described above, the "noncertificate" option and other revisions to the NGA and NGPA set forth in S. 341, we also agree with Senator Bingaman's fundamental objective of further streamlining and enhancing the traditional NGA § 7 certification process. This section briefly summarizes Brooklyn Union's views on Senator Bingaman's amendments.

1. Environmental Contractors. We support this amendment which would allow applicants to choose from a list of FERC-designated contractors for the preparation of environmental documents necessary to assess projects, as opposed to a FERC-selected contractor.

2. Environmental Assessments. We support this provision to allow for an applicant-prepared environmental assessment principally because of the higher probability of necessary resources being timely applied to the assessment.

3. Ex Parte Rules. This amendment would appear reasonable given the essential consultative nature of the NEPA process between and among federal agencies.

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4. Unopposed Applications. We agree with this amendment and would suggest the addition of language to allow the project to proceed as unopposed if a protest filed in the 60-day period is withdrawn or otherwise resolved within 30 days following the 60-day notice period.

5. Replacement Facilities. We support this provision as reasonable in light of historic Commission practice. See 18 C.F.R. § 2.55(b).

6. Conclusive Evidence of Need. We strongly support this provision as an obvious and reasonable way of dealing with the so-called Ashbacker issue and as a necessary and proper means to abate the filing of "spoiler" applications.

7. Phased Certificate Procedures. We support this amendment as a reasonable administrative tool to expedite projects.

8. Priority Procedures. We strongly support this amendment also on the grounds that it expedites the certification process without sacrificing substantive FERC review, analysis and decision-making.

9. Nonjurisdictional Facilities. We strongly support this amendment and note that it is particularly relevant to local distribution company nonjurisdictional facilities which do not need

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Commission review in light of the many State and local laws that may apply.

CONCLUSION

Brooklyn Union endorses the purposes of the National Energy Security Act of 1991. The Act provides for a balanced energy plan, reduces our dependence on imported oil and facilitates the continuation of reliable natural gas supplies over the long-run. We are pleased that the Act recognizes the important role that natural gas can play in contributing to energy security as well as improving the environment. Of course, we stand ready to work with you and your staffs on specific language to effectuate our recommendations on the various sections of S. 341.

The CHAIRMAN. Thank you, Mr. Catell.
Mr. Graham.

**STATEMENT OF F. JOSEPH GRAHAM, DIRECTOR, ENERGY POLICY
AND SUPPLY, UNION CARBIDE CORP., ACCOMPANIED BY
GORDON GOOCH, COUNSEL**

Mr. GRAHAM. Thank you, Mr. Chairman. I am Joe Graham, director of Energy Policy and Supply at Union Carbide Corporation. We are a large industrial user of natural gas. We consume approximately 70 billion cubic feet as gas, in addition to the use of a considerable amount of liquids for feed stocks.

We wholeheartedly supported the Wellhead Decontrol Act of 1989. This act provides the greatest hope for optimum exploration and development of our domestic natural gas resource. But our hope would be dashed if a competitive market for natural gas is impaired by lack of access to markets or by unreasonable charges to get to market.

One of our concerns with any legislation is whether the gains achieved by the Wellhead Decontrol Act will be wiped out or impaired by abusive market power. Another concern is whether consumers of gas will be deprived of open access with comparable service at comparable rates to the national transportation grid.

S. 341 contains many positive features which have been detailed in my testimony. Our primary concern center around section 10001, the new optional procedure for construction of natural gas facilities. These same concerns apply to parts of the Natural Energy Strategy Act; in particular, the optional certificate procedures in the nonjurisdictional option. We respectfully recommend that none of these procedures be enacted.

There are three parallel methods to expedite construction of new pipelines proposed in S. 341. First, utilization of rulemaking procedures for the issuance of construction certificates, combined with a streamlined environmental review. We respectfully suggest that this reform alone may suffice to expedite new pipeline construction without carrying with it the potential for abuse of market power.

Secondly, transportation of natural gas under the NGPA, including construction of interstate pipelines. This includes a significant reform in both opening the system to end-users and producer marketers who were not including in the act, and in codifying open access transportation. If additional construction authority is deemed necessary, then this construction authority should suffice.

Third, the optional procedures for construction of natural gas facilities should be dropped. Our concerns are that the goals of comparable third-party transportation service will be frustrated, and that abuses of market power will result. For example, a new pipeline may be the only realistic link between supply and a market. If a link is not open access, interstate transportation may be interdicted.

A new pipeline may have such market power that it can dictate the terms of transportation agreements, not negotiate them. A new pipelines may apparently be built for the exclusive use of a pipeline or its affiliate, freezing out access by any other person. This is serious enough a problem with regard to new pipelines, but is also

a problem with existing pipelines. For example, a pipeline may build under this section to a new producing field for its own use and compel producers to deal only with the pipeline.

Section 10001 may negate the jurisdiction of the Commission to require that open access transportation be provided for the conditioning power granted by section 7 of the Natural Gas Act. With the rate provision of section 10001, an interstate pipeline will be allowed to collect and to keep unjust and unreasonable rates charges to shippers who are not favored with a contract. There is nothing to prevent the pipeline from building in excess profits in its initial rates, and customers will either have to pay or forego service.

It is for these reasons that we recommend that section 10001 be dropped; the same reasons impel the same recommendation with respect to NESA sections 204 and 205. If anything, the restrictions on the Commission's ability to stop unjust and unreasonable rates is more restricted in the NESA than it is in 341.

With respect to the national energy strategy itself, we commend the two pre-conditions to any lessening of a commission's jurisdiction to protect consumers. First, that there be comparable third-party transportation provided on interstate pipeline, and second, that the interstate pipeline does not possess market power.

The NESA also creates a number of new types of pipelines for purposes of, for regulation in one form or another. Our preliminary count is that NESA will result in approximately 10 to 12 different types. We continue to believe that an unrestrained national grid, with uniform standards of regulation to ensure against abuse of market power by public utilities, is in the public interest. We ask that the committee consider codifying the principal of open access transportation on all interstate pipelines, however many types there may turn out to be.

Thank you for the opportunity to be heard today. I have brought with me my attorney, Gordon Gooch, who with me and both of us will be pleased to respond to your questions. Thank you.

[The prepared statement of Mr. Graham follows.]

TESTIMONY OF F. JOSEPH GRAHAM
ON BEHALF OF THE UNION CARBIDE CORPORATION
AND THE PETROCHEMICAL ENERGY GROUP
TO THE COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

Title X of S. 341
and the National Energy Strategy

Committee on Energy and Natural Resources
United States Senate

March 4, 1990
Washington, D.C.

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TESTIMONY OF F. JOSEPH GRAHAM
ON BEHALF OF THE UNION CARBIDE CORPORATION
AND THE PETROCHEMICAL ENERGY GROUP
TO THE COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

My name is F. Joseph Graham. I am Director of Energy Policy and Supply for Union Carbide Corporation. We appreciate the opportunity to appear before this Committee to discuss Title X of S. 341, the National Energy Security Act of 1991, and the comparable portions of the President's National Energy Strategy, in response to the letter of February 21, 1991 from the Honorable J. Bennett Johnston, Chairman, to Thomas D. Finnigan of Union Carbide Corporation.

It is my understanding that Union Carbide has been invited to be on a panel which includes a producer, an interstate pipeline, a local distribution company, and a State Commission, with Union Carbide as a representative of the class of industrial end users, the largest class of natural gas consumers in this country by far.¹ We thus feel an obligation to present, not exclusively our own views, but our best estimate of the general viewpoint of the class of industrial users, acknowledging full well that any such effort may not be completely successful.

Union Carbide is in the class of petrochemical companies. Petrochemical companies would represent uses of gas in all industrial applications.

It should also perhaps be noted that the class of petrochemical companies can be divided into two sub-sets: those which are vertically integrated with major oil companies and those which are independent. Union Carbide is in the latter sub-set.

Other independent petrochemical companies, represented by the Petrochemical Energy Group, have reviewed this testimony and endorsed it. Those companies are: Dow Chemical U.S.A.; Eastman Chemical Company; Hoechst Celanese Corporation; Quantum Chemical Corporation, USI Division; and Union Carbide Corporation.

While, due to the subject matter of the pending legislation, much of our testimony will perhaps suggest problems with transportation in the national sense, let me assure you that there is no personal reflection intended. In fact, Union Carbide itself, until recently, owned an interstate pipeline and presently owns a Hinshaw pipeline.

¹ See page 5, infra.

The legislation implementing the National Energy Strategy was not available in time to be incorporated into this filed testimony.

I. SUMMARY

Industrial end users are the largest class of consumers of natural gas in this country. An abundant supply of reasonably priced natural gas transported and delivered to industrial facilities at just and reasonable rates is essential to a strong economy, one that is able to compete effectively at home and in world markets.

In analyzing any legislation, the test is: will the legislation promote or impede a competitive market for natural gas from the wellhead to the burner tip?

S. 341, in general, meets this test, with the possible exception of the Optional Procedures for the Construction of Natural Gas Facilities, one of three parallel methods set forth in S. 341 to achieve expedition in construction of new pipelines.

The three parallel methods to achieve expedition are:

- (1) Authorization to use rulemaking procedures, Section 10005, coupled with making the FERC the lead agency for environmental reviews.
- (2) Section 10002, Transportation of Natural Gas under the NGPA.
- (3) Section 10001, Optional Procedures for the Construction of Natural Gas Facilities.

The concerns with this last proposal arise because comparable third-party transportation service, necessary for a competitive market, has not been achieved and because market power in the hands of pipelines and brokers continues to exist.

While the intent of the Optional Procedures is positive, there are negative potential consequences which merit Committee consideration. Those potential consequences include (1) a bottleneck potential to limit access to markets, (2) a potential for abuse of market power, (3) a potential for creating a monopoly or a monopsony for the interstate pipeline or its affiliate by authorizing construction for the exclusive use of the pipeline or its affiliate (both with respect to new pipelines and additions to existing pipelines), (4) possible negation of open access transportation conditions, and (5) potential for allowing the pipeline to collect and to retain unjust, unreasonable, unduly discriminatory, and preferential rates and services.

With respect to transportation under the NGPA, Section 10002, significant and needed reforms are provided, among them being the elimination of restrictions on access by end users and producer/marketers competing with the pipeline and, most significantly, the codification of open access transportation.

Recommendations concerning S. 341 include the suggestion that a national grid of transportation service might be better achieved by having a single class of interstate pipelines for purposes of insuring open access transportation and comparable third-party transportation.

Sufficient expedition in construction, without untoward consequences, may be achieved by the (a) authority to conduct certificate proceedings by rulemaking, and (b) the new NEPA compliance procedures, the first of the three parallel methods incorporated in S. 341.

In the alternative, if a new class of interstate pipelines is to be created or codified, it should suffice to proceed on the NGPA model, Section 10002, dropping the Optional Procedures, Section 10001.

The Committee is also requested to consider codifying open access, with comparable service for third party transporters at comparable rates, whether, in the end, there are one, two, three or more different types of interstate pipelines.

At the request of Senator Bingaman, certain amendments to S. 341 are addressed and concerns are expressed similar to those expressed relating to the Optional Procedures.

While the legislation implementing the National Energy Strategy was not available in time to meet the filing deadline, the policy itself is analyzed. The two pre-conditions to any change with respect to pipeline rates or transportation service are critical. Those are, first, to assure comparable service to third party shippers and, second, to assure that the pipeline does not have market power.

Since the determination of market power will be critical to the implementation of the NES, we attach as Appendix B an analysis by Ernst & Young of the present FERC methodology for addressing this issue. If the present system is going to be replaced, a careful look is indicated with respect to the system that will be the replacement to be sure that it will be an improvement.

Once the two preconditions have been met, the issues surrounding the adjustment to the regulation of pipeline sales for resale in interstate commerce and to the regulation of transportation in interstate commerce can be addressed. The

underlying concern is to avoid having captive customers subsidize the sales or transportation on behalf of the pipeline.

With respect to the issue of capacity brokering, concerns are expressed over the possibility of creating a new monopoly or monopsony power by giving control over the transportation or natural gas in interstate commerce to local distribution companies and to State Commissions.

In sum, these issues before the Committee are extremely significant and far reaching. It is our hope that the ultimate result will be a national grid, regulated uniformly but only to the minimum extent necessary to prevent abuse of market power and to assure open, non-discriminatory third party transportation.

II. INTRODUCTION

A. Interest of End Users.

An abundant supply of reasonably priced natural gas delivered to industrial facilities at just and reasonable rates is essential to a strong economy, one that is able to compete effectively at home and in world markets.

"Natural gas" are words that cover more than the gas that reaches the burner tip, whether in a plant or a home. Natural gas, as it comes from the earth, has in its stream, in varying degrees, other essential hydrocarbons, usually called "natural gas liquids." These natural gas liquids are removed from the natural gas stream and marketed as ethane, propane, butane, and a host of other descriptive names. Natural gas and natural gas liquids, together with the same chemical compounds emanating from refineries, form the backbone of the petrochemical industry. Natural gas and natural gas liquids (the latter sometimes referred to as "liquified petroleum gases") also have essential uses as fuels or fuel components.

B. Categories of Industrial End Uses of Natural Gas.

It is generally recognized that industrial uses of "natural gas" can be classified into these categories:

"feedstock", where the natural gas and the natural gas liquids are the raw materials from which petrochemical products are manufactured;

"process", where the natural gas is burned, not just for its heat content, but for the precise temperature controls uniquely achievable with clean burning natural gas. Applied directly or indirectly, process gas can achieve a precise chemical or physical reaction essential to certain manufacturing processes;

"plant protection", where the natural gas provides safety to the industrial workers and the facilities they manage. As an example, natural gas is used in some coal firing installations in order to stabilize the flame, increasing both efficiency and safety; and

"fuel use", sometimes divided into boiler and non-boiler subsets. As examples, natural gas can be burned directly in a turbine to generate electricity, or natural gas can be burned to fire a boiler that generates heat, steam, and electricity. The steam itself is essential to some industrial processes.

The first three categories are uses which must be regarded as essential and non-substitutable uses of natural gas. See Natural Gas Policy Act of 1978 ("NGPA") § 402, 15 U.S.C. § 3392 (1988). The last category, at least in theory, has some or complete potential for substitution of other fuels, such as refined petroleum products, coal, or electricity generated by means other than natural gas.

I hope it will also suffice for this purpose simply to allude to conservation potentials of the use of natural gas as a fuel, with one exception: there is no meaningful "conservation" potential in the essential uses of natural gas. For example, any "conservation" in feedstock use translates into less production, less efficiency, and lower productivity.

To place these industrial uses of natural gas in context, industrial uses are the largest gas consumer group in this country, followed by residential consumers, with commercial and electric utilities in almost a tie for third and fourth in 1989. As illustrated below, industrial consumption comprised some 40% of the consumption in this country in 1989. This percentage refers only to the use of natural gas as methane. The use as natural gas liquids is not included in this number.

Natural Gas Consumption by End-Use Sector (1989):

<u>Consumer</u>	<u>Delivered to Consumer</u> (Billion Cubic Feet)	<u>Percentage of Total</u> <u>Deliveries</u>
Residential	4777	28%
Commercial	2719	16%
Industrial	6816	40%
Electric Utilities	2768	16%
	<u>17,080</u>	<u>100%</u>

U.S. Department of Energy, Energy Information Administration, Monthly Energy Review at 58, Table 4.3 (January, 1991).

III. APPROACH TO ADDRESSING THE PENDING LEGISLATION.

- A. Goal: Adequate Supply of Natural Gas at Reasonable Prices at the Wellhead and as Delivered to the Point of End Use.

As previously stated, the ultimate goal is to achieve an adequate supply of reasonably priced natural gas and natural gas liquids delivered to all consumers, including industrial facilities, at just and reasonable rates. This is essential to a strong economy, one that is able to compete effectively against foreign imports at home and able to compete in world markets. The chemical sector of our economy, of which the petrochemicals are a substantial part, has been a major contributor to the positive trade balances.²

- B. Overall Test: Will the Legislation Promote or Impede a Competitive Market for Natural Gas from the Wellhead to the Burner Tip?

This goal should be tested in the context of the sectors of the natural gas industry itself. In gross, those sectors are: the wellhead and field sectors; the pipeline sectors; the ultimate delivery sectors, if other than the pipeline itself; and imports.

As I have stated, the wellhead and field sector is the source of domestic natural gas and natural gas liquids. We wholeheartedly supported the Wellhead Decontrol Act. Natural Gas Wellhead Decontrol Act of 1989, Pub. L. No. 101-60, 103 Stat. 157 (codified in scattered sections of 15 U.S.C.). The removal of federal price and allocation controls, when ultimately achieved, provides the greatest hope for optimum exploration and production of our domestic resources. But these hopes will be dashed if by act of Congress or even by action of the FERC a competitive market for natural gas and natural gas liquids is interdicted or impaired by lack of access to markets or by unreasonable charges to get to market, as imposed by transporters.

One of our concerns with any legislation is whether the gains achieved by the Wellhead Decontrol Act will be wiped out or impaired by the enhancement or codification of monopsony or monopoly power for the downstream transportation sectors. The companion concern is whether consumers of gas will be deprived of

² The value of exports of U.S. chemicals and allied products in 1990 is estimated to exceed imports by \$15.8 billion. U.S. Department of Commerce, International Trade Administration, 1991 U.S. Industrial Outlook (January, 1991) at 12-2. The Chemical Manufacturers Association estimates \$16.5 billion.

"open access", with comparable service at comparable rates, to the national transportation grid.

As the National Energy Strategy³ puts it:

When shippers and consumers do not have adequate alternatives to the utilization of existing facilities, some form of regulation is necessary to protect shippers and consumers from undue discrimination or other abuses that could be imposed by the exercise of market power.

* * * *

Regulation of pipeline and distribution companies is necessary to protect consumers without alternative suppliers, as well as some producers and other shippers who lack alternate means of transporting their gas to market. Otherwise, a pipeline with market power could dictate lower purchase prices to producers and higher sales prices to customers by restricting access to transportation and other pipeline services.

NES at 91-93.

These are the tests by which we tender comments on the pending legislation, or, in the case of the NES, the stated legislative goals.

IV. ANALYSIS OF PENDING LEGISLATION IN LIGHT OF THE GOAL AND THE TEST.

- A. S. 341 in General is Positive with the Possible Exception of Optional Procedures for the Construction of Natural Gas Facilities.

In general, the provisions of S. 341 meet these tests, with the possible exception of Section 10001, the "Optional Procedures for the Construction of Natural Gas Facilities". In order to focus on our concerns, comments on other provisions are included in Appendix A and are incorporated in the discussion below, as appropriate.

³ National Energy Strategy (First Edition; February, 1991) (hereinafter cited as "NES").

- B. Background for Conclusion: Comparable Third-Party Transportation Service, Necessary for a Competitive Market, Has Not Been Achieved, and Market Power Continues to Exist.

In order to explain how this conclusion was reached, some short summary of the status quo on the transportation sectors should be set forth. Presently, interstate natural gas pipeline companies, as a class, do not provide comparable third-party transportation service.

The result has been a skewing of the natural gas markets, where pipelines, as a class, retain dominance in the sale of gas on a longer term "firm" basis and competitors are relegated to primary reliance on short term, even monthly, "spot" sales utilizing an inferior "interruptible" service, when capacity is available. This carries with it a certain seasonal segmentation of the gas markets, where the interstate pipelines as a class control the facilities necessary to meet the peak day and other heavy demands of sales customers, while, in off-peak periods, the sales customers have more freedom to select between the pipeline as merchant and competitors of the pipeline as merchants of gas.

How this came about can be quickly summarized.

Interstate natural gas pipelines were authorized by the Natural Gas Act of 1938 ("NGA") to engage in both the business of transporting gas in interstate commerce and the business of buying and selling gas. Natural Gas Act § 1(b), 15 U.S.C. § 717(b) (1988).⁴

Utilizing the transportation function, end users and local distribution companies ("LDCs") could, and did, choose to contract for gas supply directly with producers at the wellhead, as an alternative to the purchase of gas from the pipeline as a

⁴ While the transportation in interstate commerce was subject to plenary and direct regulation, only sales for resale in interstate commerce were so subjected. NGA § 1(b), 15 U.S.C. § 717(b) (1988). "Sales for resale" may well be described as "wholesale" sales to other interstate pipelines or to local distribution companies for resale to ultimate consumers of all classes. The other class of sales, usually called "direct" or "non-jurisdictional" sales, are made by interstate pipelines to ultimate consumers of all classes, including but not limited to industrial users. Through the cost allocation process in rate cases, the Commission insures that an appropriate amount of costs are allocated away from the wholesale customers and not included in their rates.

merchant of gas. However, without delving into the history, suffice it to say that, over time, the "transportation" function was transformed. Essentially "transportation" service was provided only to other interstate pipelines, not to local distribution companies nor to end users, with some exceptions. A virtual monopoly over the sales of natural gas in interstate commerce accreted to the interstate pipelines as a class. What competition there was, in areas served only by interstate pipelines, was only between the pipeline merchants, and that to a limited extent. As the NES puts it, "prior to open access transportation, virtually all gas bought by LDC's was sold by the pipeline under close regulation by FERC." NES at 25

By the same token, aided by federal regulation of wellhead sales for resale and the virtual denial of access to the markets via transportation from the wellhead to the local distribution companies or to end users, the interstate pipelines also enjoyed a virtual monopsony over the purchase of natural gas for the interstate market.

Curtailments of natural gas sales in the 1970s by the interstate pipelines created a problem of national emergency. I need not review with this Committee the actions taken by the Congress to address this situation, in the Emergency Natural Gas Act of 1977 (Pub. L. No. 95-2, 91 Stat. 4), in the Natural Gas Policy Act of 1978 (15 U.S.C. §§ 3301 et seq. (1988)), and ultimately in the Wellhead Decontrol Act.

What remained intact after passage of the NGPA, however, was the basic fact that interstate natural gas pipelines, as a class, retained their virtual monopoly over sales of natural gas in interstate commerce, whether "wholesale" or "retail". By 1985 the FERC, successor to the FPC, decided to alter this exercise of market power. In Order No. 436, the Commission instituted the "open, non-discriminatory" access to transportation service on interstate pipelines.⁵

⁵ Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol, Order No. 436, F.E.R.C. Stats. and Regs., [Regulations Preambles 1982-1985] (CCH) ¶ 30,665 (1985), vacated and remanded sub nom. Associated Gas Distributors v. FERC, 824 F.2d 981 (D.C. Cir. 1987), cert. denied sub nom. Interstate Natural Gas Ass'n of America v. FERC, 108 S.Ct. 1468 (1988), repromulgated as Order No. 500, III F.E.R.C. Stats. and Regs. (CCH) ¶ 30,761 (1987); modified, Order No. 500-A, III F.E.R.C. Stats. and Regs. (CCH) ¶ 30,770 (1987), modified further, Order No. 500-B, F.E.R.C. Stats. and Regs. (CCH) ¶ 30,772 (1987), modified further, Order No. 500-C, III F.E.R.C. Stats. and Regs. (CCH) ¶ 30,786 (1987), modified further, Order No. 500-D, III F.E.R.C. Stats. and Regs. (CCH) ¶ 30,800 (1988), reh'g denied, Order No. 500-E, 43 F.E.R.C. (CCH) ¶ 61,234 (1988), modified

The D.C. Circuit hailed this decision as possibly one of the four great milestones in federal regulation of natural gas. The Court succinctly described the situation confronted by the FERC:

On October 9, 1985 the Federal Energy Regulatory Commission ("FERC") issued Order No. 436, 50 Fed.Reg. 42,408 (1985) (codified at scattered sections of 18 C.F.R.). The Order envisages a complete restructuring of the natural gas industry. It may well come to rank with the three great regulatory milestones of the industry: the passage of the Natural Gas Act, 15 U.S.C. §§ 717 et seq. (1938) ("NGA") in 1938, the imposition of price controls on independent producers' wellhead sales under Phillips Petroleum Co. v. Wisconsin, 347 U.S. 672, 72 S.Ct. 794, 98 L.Ed. 1035 (1954), and adoption of the Natural Gas Policy Act ("NGPA"), 15 U.S.C. §§ 3301 et seq. (1978).

At stake is the role of interstate natural gas pipelines. Although they are obviously transporters of gas, they have until recently operated primarily as gas merchants. They buy gas from producers at the wellhead and resell it, mainly to local distribution companies ("LDCs") but also to relatively large end users. The Commission has concluded that a prevailing pipeline practice -- particularly their general refusal to transport gas for third parties where to do so would displace their own sales (Joint Appendix ("J.A.") 318-19) -- has caused serious market distortions. It has found this practice "unduly discriminatory" within the meaning of § 5 of the NGA. Order No. 436 is its response.

The essence of Order No. 436 is a tendency, in the industry metaphor, to "unbundle" the pipelines' transportation and merchant roles. If it is effective, the pipelines will transport the gas with which their

Further, Order No. 500-F, III F.E.R.C. Stats. and Regs. (CCH) ¶ 30,841 (1988), reh'g denied, Order No. 500-G, 46 F.E.R.C. (CCH) ¶ 61,148 (1989), vacated and remanded, American Gas Ass'n v. FERC, 888 F.2d 136 (D.C. Cir. 1988), Order No. 500-H, III F.E.R.C. Stats. and Regs. ¶ 30,867 (1989); reh'g granted in part and denied in part, Order No. 500-I, III F.E.R.C. Stats. and Regs. ¶ 30,880 (1990); aff'd in part and remanded in part, American Gas Ass'n v. FERC, 912 F.2d 1496 (D.C. Cir. 1990); order on remand, Order No. 500-J (issued Feb. 13, 1991).

own sales compete; competition from other gas sellers (producers or traders) will give consumers the benefit of a competitive wellhead market.

Associated Gas Distributors v. FERC, 824 F.2d 981, 993-94 (D.C. Cir. 1987) (footnote omitted) cert. denied sub nom. Interstate Natural Gas Ass'n of America v. FERC, 108 S.Ct. 1468 (1988).

Order No. 436 was issued in 1985. Earlier this year, Chairman Martin Allday of the FERC asked the rhetorical question, "Are we there yet?" The answer is "NO." Even as this testimony is given, the Commission is working on a new rulemaking to advance comparability of service as between the pipeline as a gas merchant and competitors who need to rent capacity on the pipeline in order to market gas in competition with the pipeline -- or its marketing affiliate. Docket No. RM91-3-000, Revisions to Regulations Governing Self-Implementing Transportation Under Part 284 of the Commission's Regulations (as reflected on Commission agenda, not yet issued).

Unless and until comparability of service is achieved, whereby a customer will be assured of the same quality and price of service whether the merchant of the commodity of gas is the pipeline (or an affiliate of the pipeline) or is a competitor of the pipeline, the interstate pipelines will retain significant market power, or, if you will, monopoly power. As we will discuss later, the National Energy Strategy, in pertinent part, is predicated on the preconditions that (1) comparable third-party transportation be actually provided, and (2) a particular pipeline does not possess significant market power in a particular market. NES at 93.

Comparability of service includes open, non-discriminatory access to transmission facilities of all kinds, to storage facilities, to receipt points where gas is received into the system, to capacity on interconnecting pipelines now controlled exclusively by the pipeline as merchant, and to balancing of receipts and deliveries. Thus, sales of the pipeline merchant and of competitors will both be made at the receiving end, not the delivery end, of the pipeline, and the transportation, storage, and other attributes of comparable service will be the same, and at the same rates, regardless of who the commodity merchant is. The NES calls for "Comparable Third-Party Transportation Service". Id.

It would be tragic if, as the result of any legislation, progress toward open access transportation with comparability of service and rates for competitors was impeded or reversed. Indeed, since open access and comparability of service rest, not on an explicit statutory mandate, but on Orders of the Commission, there is concern that a future Commission might decide to restore the pipeline monopsony or monopoly power, in whole or in part.

With respect to local distribution companies, including "Hinshawed" interstate pipelines which the Congress decided to place under primary State regulation (Natural Gas Act § 1(c), 15 U.S.C. § 717(c) (1988)), discussion will be deferred until the issue of capacity brokering is addressed.

C. Potential Effect of "Optional" Pipelines.

We do recognize, and applaud, the intent to expedite needed construction of interstate pipelines. In essence, it appears that S. 341 presents three parallel and fungible provisions addressing the same issue: Section 10001 (Optional Procedures for the Construction of Natural Gas Facilities), Section 10002 (Transportation of Natural Gas Under the NGPA), and Section 10005 (Utilization of Rulemaking Procedures).

Against this summary background, the types of pipelines created or codified by S. 341 can be considered. For these purposes we wish to make a clear distinction between problems associated with the actual construction of interstate pipelines and the problems associated with the provision of service on interstate pipelines. The problems associated with the latter are here discussed. (In IV.(E) of this testimony we will suggest that Section 10001 be dropped.)

A threshold question might be asked as to whether all are needed. We note the statement made in this regard by Senator Johnston, as it appeared in the Congressional Record of February 5, 1991 at S1514-15, and we will return to this topic in our conclusion.

Title X, in part here discussed, does codify, at least prospectively, that authority does exist to construct interstate pipelines under Section 311 of the NGPA, thus obviating the necessity of securing a license (called a "certificate of public convenience and necessity") prior to construction of an interstate pipeline. S. 341, Section 10002. Most significantly, this section also codifies the principle of open access transportation and makes clear that end users and producer/marketers can now secure access to Section 311 lines. S. 341, Section 10002(c).

In Section 10001, the optional procedure establishes a new type of interstate pipeline. It, like the 311 pipeline described above, does not need a license to be constructed. S. 341, Section 10001(b)(1). There is no explicit provision for requiring open access transportation. While the authority of the Commission to attach conditions to the operating certificate appears to be intact (S. 341, Section 10001(b)(2)), the Commission's jurisdiction to assure that all rates are just and reasonable and that all services provided are not unduly discriminatory is circumscribed (S. 341, Section 10001(c)), even

when the pipeline is dealing with itself or an affiliate (S. 341, Sections 10001(a)(2), and (c)).

Thus, if S. 341 were to become law as it is today, it appears that the following would be the situation:

TYPE OF INTERSTATE PIPELINE	OPEN ACCESS CODIFIED IN S. 341?
Section 7 of NGA	No, left to Commission Orders
Section 311 of NGPA	Yes
Section 10001 of S.341	No, limits Commission jurisdiction

The following paragraphs detail some potential problems for policy consideration. No suggestion is made that any of the described potentials will, in fact, be realized in each and every situation. The suggestion is made that they can be realized in a way that might frustrate the obvious and laudable intent of S. 341. Our effort here is to call to the attention of the Committee how someone might abuse the freedom granted. In this context, we look only at the negative side.

(1) Bottleneck Potential to Limit Access to Markets.

First, we suggest that there is a potential for a bottleneck to be created that may operate to interdict or to impede the flow of natural gas in interstate commerce.

It is not unreasonable to anticipate that a Section 7, a Section 311, and a Section 10001 pipeline may be the interconnected path for a sale of natural gas from the wellhead to the customer. (In order to make this illustration virtually free from cavil on extraneous grounds, please assume that the shipment is made for a relatively small quantity of gas in the middle of the summer when capacity on all pipeline segments is minimally utilized). So long as the Commission chooses to foster open access transportation on Section 7 interstate pipelines, the shipment can hopefully get that far on its way to market. With the codification of open access in S. 341, Section 10002(c), the shipment can get through the 311 segment. When it reaches the Section 10001 interstate pipeline, there is a different story. That interconnection may well be the end of the line, far short of the market.

This presents an important policy call for the Committee to make. Against the test of whether this legislation enhances monopoly or monopsony power in the transportation or sale of natural gas in interstate commerce, this aspect raises a serious question.

Pending further discussion below, two questions are posed. First, should the Committee codify the principle of open access transportation on Section 7 interstate pipelines, as it does on the Section 311 pipelines? Second, should the Committee exempt Section 10001 interstate pipelines from the principle of open access transportation?

(2) Potential for Abuse of Market Power.

Second, with respect to the "Optional Procedures for the Construction of Natural Gas Facilities", S. 341, Section 10001, we suggest that the potential for abuse of market power is possibly created.

The intent of this Section, among other things, may be to respond to the delays caused by disputes among competing interstate pipeline projects reaching new or expanded markets by reducing the issues on which challenges can be made and FERC review sought (compare NES, page 92, col. 2 last paragraph). Section 10001 appears to meet this intent, but, unfortunately, may go too far, with the result that monopoly and monopsony power, rather than competition, will be fostered.

Another apparent intent is to provide an opportunity for willing shippers and a willing interstate pipeline to enter into agreements with little or no regulatory scrutiny, allowing arms' length bargaining to substitute for regulation.

This premise, if accurately perceived, does not apply when the shipper and the pipeline are one and the same person or are affiliates.

In addition, this premise does not provide for the shipper, not favored by the interstate pipeline, who may be offered no service at all or only at rates, terms, and conditions that are effective to destroy competition.

Finally, this premise does not apply where there is no effective competitive alternative to the Section 10001 pipeline.

The NES addresses these concerns in two basic ways not presently reflected in Section 10001 of S. 341.

First, a new pipeline's rates and services would be deregulated "if the new pipeline does not have monopoly or monopsony power over customers or producers...." NES at 95.

Second, "protection would be provided for those without competitive alternatives who are unable to reach contractual agreement with the pipeline." *Id.*

- (3) Potential for Creating a Monopoly or a Monopsony for the Interstate Pipeline (or its Affiliate) by Authorizing the Section 10001 Pipeline to be Built Exclusively for the Pipeline's (or its Affiliate's) Use.

(a) New pipelines.

Note that Subsections 10001(a)(2) and (c)(1)(iii) would allow an interstate pipeline to build a new pipeline for its own exclusive use, barring all others. If an interstate pipeline can build for itself exclusively, it appears to follow that it can build for its own affiliate exclusively. The Committee may wish to consider whether it is in the public interest to foster monopolies and monopsonies, designing around open, non-discriminatory access. In contrast, as will be discussed below, the new NGPA Section 311 does not permit an interstate pipeline to construct a new pipeline for its own use and does require that the new pipeline be an "open access" pipeline.

(b) Fragmented additions to existing pipelines.

This issue is further raised in Section 10001(b)(1), authorizing construction of "a facility to provide transportation service." However, "a facility" is not defined, and this lack of definition may lead to results not intended by the Committee. As examples:

-- an interstate pipeline, recognizing that markets have created a demand for more capacity on its mainline transmission system, may simply build a "loop", perhaps best described as a parallel line to existing lines, and capture the entire incremental market for itself or its affiliate.

-- an interstate pipeline may choose to build an interconnecting pipeline, however short in length, near delivery points where capacity is now constrained. In the same manner, the interstate pipeline can thus capture the entire incremental market for itself or its affiliate.

-- in the producing area, the interstate pipeline may choose to build a new Section 10001 pipeline, rather than expand its existing system, to reach newly developed gas supply. The producers in that situation would be forced to deal only with the interstate pipeline or its affiliate, thus creating a monopsony power.

-- an interstate pipeline may choose to build a Section 10001 pipeline that interconnects with its own existing system at a bottleneck point which chokes off access upstream of the bottleneck. Those customers attempting to maintain the flow of their supplies, and the Commission itself, would be powerless to

prevent this from happening, thus further increasing the monopoly power of the interstate pipeline.

In the context of Section 7 of the Natural Gas Act, the word "facilities" has, in effect, definition in the context of plenary jurisdiction, definition that would include all of the above examples.

It is noted, however, that the operative word in Section 10001(b)(1) is "construction", not "construction or extension." From the significant difference it may be inferred that only new pipeline projects are intended to be authorized.

The Committee may wish to define "facility" in a way that will prevent any kind of predatory behavior, if Section 10001 is maintained.

(4) Possible Negation of Open Access Transportation Conditions.

We suggest that Section 10001 may operate to negate any effective power of the Commission to enforce open access transportation, with comparable service and just and reasonable rates, even when the pipeline or its affiliate is not a shipper on the Section 10001 pipeline facility.

Subsection (b)(2) provides for an operating certificate to be issued and does provide for conditions to protect the public interest to be imposed. The pipeline must accept the certificate, as conditioned. This is in contrast to the present situation where an interstate pipeline may reject the certificate if it does not like the conditions. This is positive, but it is more than offset by the limitations otherwise imposed on the Commission's jurisdiction. For example, it would appear that the Commission could, and should, require the interstate pipeline to operate as an open access, non-discriminatory transporter, providing comparable service to competitors and other shippers. But subsection (c) effectively negates this power. Under subsection (c), the Commission is powerless, or apparently powerless, to review the initial rates, terms, and conditions imposed by the pipeline, so long as the filing is complete. Therefore, the Commission cannot enforce an open access condition from the time that a Section 10001 pipeline goes into service.

There is one exception to this conclusion. Since Section 10001(e) preserves all applicable federal law, the Outer Continental Shelf Lands Act remains operative. Under that Act, access is assured.⁶

- (5) Potential for Allowing the Section 10001 Pipeline to Collect and Retain Unjust, Unreasonable, Unduly Discriminatory and Preferential Rates and Services.

The only power the Commission is explicitly given over the rates of a Section 10001 pipeline is a form of Section 5 power, but in two steps: the Commission must first determine that the rates may be unjust, unreasonable, unduly discriminatory or preferential within the meaning of the Natural Gas Act, then the Commission may embark on a Section 5 proceeding in which case the rates cannot be adjusted until the conclusion of the case, which may take years. Any adjustment would be prospective. Thus, unjust and unreasonable rates may be charged indefinitely and retained by the interstate pipeline.

As an example, assume that the interstate pipeline gave itself rates with a profit factor built in of, say, a fifty percent return on equity, as contrasted to the current norm in the range of 16%, after all federal and state income taxes, in the rates it files for shippers who are not favored with contracts, in accordance with Section 10001(c)(1)(i). Although this rate would be immunized from any scrutiny by the FERC, the rate is still established pursuant to power of federal preemption. Therefore, the customer would have no choice but to pay this rate or to forego service. It could take years to correct this under Section 5 procedures, and the pipeline would nevertheless retain the unjust rates -- or effectively keep unwanted competitors off of the system.

This situation should be contrasted with the reforms of NGA Section 4 that S. 341 provides in "Rates and Charges" (Section 10004), discussed in Appendix A. In "Rates and Charges", the Commission is given expanded jurisdiction to prevent interstate pipelines from collecting and retaining unjust and unreasonable rates. In Section 10001, the Commission's

⁶ Outer Continental Shelf Lands Act, ch. 345, 67 Stat. 462 (1953) (codified as amended in scattered sections of 16, 42 and 43 U.S.C.). See Interpretation of, and Regulations Under, Section 5 of the Outer Continental Shelf Lands Act (OCSLA) Governing Transportation of Natural Gas by Interstate Pipelines on the Outer Continental Shelf, Order No. 509, III F.E.R.C. Stats. and Regs. (CCH) ¶ 30,842 (1988), promulgating 18 C.F.R. §§ 284.301 - 284.305 (1990); as modified, Order No. 509-A, III F.E.R.C. Stats. and Regs. (CCH) ¶ 30,848 (1989).

present authority under Section 7 and Sections 4 and 5 of the NGA are substantially weakened. However, it must be noted that Section 10001 does not appear to repeal Section 4 for these pipelines and, indeed, reinforces Section 4 with the explicit filing requirements in (c)(1). Thus, perhaps the better construction of S. 341 is that the Commission will retain its jurisdiction under Section 4 to review the rates of the Section 10001 pipelines whenever the interstate pipeline files a rate case, thus having the authority to require refunds and to establish lower rates as of the time the rates in the new filing go into effect. This would be some mitigation, but the basic problem would remain for the period of time before a new rate case was filed and the newly-filed rates went into effect.

D. Transportation of Natural Gas Under the NGPA (S. 341, Section 10002).

This section explicitly resolves, perhaps only on a prospective basis, the question of whether there is authority to construct interstate pipelines under the NGPA rather than exclusively under the Natural Gas Act.

This section also resolves, and provides needed reforms, in assuring that NGPA Section 311 interstate pipelines can be used to transport gas for a class of persons other than intrastate pipelines and local distribution companies. S. 341, Section 10002(c). Thus, end users and producer/marketers are no longer excluded from the class of those who can secure service in their own right. Thus eliminated is a statutory bottleneck, where end users and others were barred from access to Section 311 transportation and Section 311 pipelines.

This latter point is most important. Section 311 pipelines can serve as vital interconnections between Section 7 pipelines. If a legitimate class of shipper is barred from using the interconnections, the result is anti-competitive.

This also resolves, at least prospectively, the issues presented by the decision of the D.C. Circuit in Associated Gas Distributors v. FERC, 899 F.2d 1250 (D.C. Cir. 1990), and in related rulemakings.

⁷ Notice of Proposed Rulemaking, Revisions to Regulations Governing Transportation Under Section 311 of the Natural Gas Policy Act of 1978 and Blanket Transportation Certificates, IV F.E.R.C. Stats. and Regs. [Proposed Regulations] (CCH) ¶ 32,476 (Aug. 2, 1990); Notice of Proposed Rulemaking, Revisions to Regulations Governing Certificates for Construction, IV F.E.R.C. Stats. and Regs. [Proposed Regulations] (CCH) ¶ 32,477 (Aug 2, 1990); Interim Revisions to Regulations Governing Transportation under Section 311 of the Natural Gas Policy Act of 1978 and

The amendment to NGPA Section 311(a)(1)(A) also preserves the point that an interstate pipeline may not, itself, use its own Section 311 pipelines or 311 transportation, since the reference in S. 341, Section 10002(c) is to "any other person" as Senator Johnston pointed out. 137 Cong. Rec. S1514 (daily ed. Feb. 5, 1991)(statement of Sen. Johnston). This is in contrast to Section 10001, which suggests that an interstate pipeline may transport on its own behalf or on behalf of an affiliate.

However, it should be noted that the broadened definition of "any other person" would now encompass use of the Section 311 pipelines by another interstate pipeline, including affiliates of that interstate pipeline owning the Section 311 pipeline, and all marketing affiliates of the pipeline owning the Section 311 interstate pipeline. With the increasing number and significance of formerly independent interstate pipeline companies that have been brought under common control, there is a new dimension for the Committee's consideration. In addition, as the Commission has recognized in Order No. 497-A, there is potential of abuse when interstate pipelines deal with their own marketing affiliates.⁸ The next paragraph deals with this concern.

The new subsection D which S. 341 proposes to add to Section 311(a)(1) of the NGPA is most important. In tandem with old subsection (B), (to be redesignated by S. 341 as subsection (C)), all shippers are assured of non-discriminatory transportation at just and reasonable rates. This is in contrast to S. 341, Section 10001.

Blanket Transportation Certificates, Order No. 526, III F.E.R.C. Stats. and Regs. (CCH) ¶ 30,894 (Aug. 2, 1990), modified, Order No. 526-A, III F.E.R.C. Stats. and Regs. (CCH) ¶ 30,899 (September 21, 1990), reh'g denied, clarification granted and denied, and petition for stay denied, Order No. 526-B, 53 F.E.R.C. (CCH) ¶ 61,141 (Oct. 31, 1990); Interim Revisions to Regulations Governing Construction of Facilities Pursuant to NGPA Section 311 and Replacement of Facilities, Order No. 525, III F.E.R.C. Stats. and Regs. (CCH) ¶ 30,895 (August 2, 1990), clarified, 52 F.E.R.C. (CCH) ¶ 61,252 (Sept. 13, 1990), reh'g denied and clarification granted, Order No. 525-A, 53 F.E.R.C. (CCH) ¶ 61,140 (Oct. 31, 1990).

⁸ Inquiry into Alleged Anticompetitive Practices Related to Marketing Affiliates of Interstate Pipelines, Order No. 497, III F.E.R.C. Stats. and Regs. (CCH) ¶ 30,820; Order on Rehearing, Order No. 497-A, III F.E.R.C. Stats. and Regs. (CCH) ¶ 30,868 (1989).

For emphasis, it bears repeating that new subsection (D) codifies open access transportation, a critical underpinning to a competitive national transportation grid. The suggestion is that this provision be broadened to cover all interstate pipelines of whatever type.

It should also be noted that there is no bar on the interstate pipeline seeking to convert a Section 311 interstate pipeline into a Section 7 interstate pipeline, after it is built. While this may well be a good policy choice if the conversion sought is to a traditional Section 7 pipeline, the good policies embodied in the revised Section 311 could all be wiped out if the conversion is to a Section 10001 interstate pipeline. It might be preferable for the Committee to address this point directly, hopefully precluding conversion to Section 10001.

E. Conclusion and Recommendations with Respect to S. 341.

We tender here the question of how many types of interstate pipelines are needed. Senator Johnston raised this subject for consideration:

These first two procedures [Sections 10001 and 10002] are new ideas. I anticipate that there will be some debate as to the relative merits of these options. The important point is that we end up with a procedure that removes the regulatory barriers to market entry in the pipeline business. In the final tally, the Energy Committee may choose to report one of the options, both of them, or to adopt some modified approach.

137 Cong. Rec. S1515 (daily ed. Feb. 5, 1991) (statement of Sen. Johnston).

If there is to be a national grid of interstate pipeline transportation, with open access and comparable service at the same rates, terms, and conditions on each pipeline, then a single class of interstate pipelines, for purposes of operations, seems in order. Rather than create, or codify the creation, of two or more new types of interstate pipelines, perhaps the better approach is to review closely the operation of the Commission's own Optional Expedited Certificate procedures to see whether Section 10005 will provide sufficient reform and expedition. See 18 C.F.R. §§ 157.100-157.106 (1990).

The Commission itself created two paths to a Section 7 certificate, one the traditional Section 7, the other the Optional Expedited Certificate procedure. See Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol, Order No.

436, F.E.R.C. Stats. and Regs., [Regulations Preambles 1982-1985] (CCH) ¶ 30,665 (1985). See also 18 C.F.R. §§ 157.5-157.21 (1990). Using this latter procedure, for example, the Commission recently issued a certificate to Transwestern Pipeline to build a major expansion from the San Juan Basin of New Mexico to California in just under four months, subject to environmental reviews.⁹

As the NES says,

Under [the Optional Expedited Certificate] program, if the firm proposing to construct a new pipeline is willing to accept the financial risks of building that line, FERC will expedite its certification process. Because the pipeline accepts the financial risk of the project, FERC does not review whether there is sufficient supply or customers for the project to be profitable.

NES at 92.

The NES goes on to suggest that it is the delays incident to environmental reviews that has limited the value of this procedure. Id.

S. 341 section 10005 adds certification procedures to the list of matters that the Commission may address by rulemakings. That change, coupled with the NEPA compliance procedures as set forth in Section 10003, may well provide the needed expedition.

In the alternative, since both Sections 10001 and 10002 achieve the same result with respect to construction of new pipeline facilities, perhaps it would be better to drop Section 10001 in favor of Section 10002.

We respectfully suggest that the Commission codify the requirement of open, non-discriminatory transportation, with comparable service at comparable rates for all interstate pipelines, whether there is one, two, three, or more different types of interstate pipelines. Section 10002(c) provides a model for achieving this result. The NES suggests that the Natural Gas Act does not impose a statutory obligation to transport natural gas for third parties on a non-discriminatory basis and indicates reliance on FERC authorities to achieve this end. NES at 93. If there is any doubt, then perhaps codification is in order.

⁹ Transwestern Pipeline Company, 54 F.E.R.C. (CCH) ¶ 61,031 (1991).

V. COMMENTS ON SENATOR BINGAMAN'S AMENDMENTS TO S. 341.

Senator Bingaman has called upon us to address Amendments to S. 341. Letter of the Senator Bingaman to Joseph Graham, February 28, 1991.

We have no comments to make with respect to "Environmental Assessments" and "Ex Parte Rules."

As to "Unopposed Applications", new Section 10009, we wish to express some concerns.

First, new Section 7(c)(1)(B)(i) appears to oust the Commission of any jurisdiction to inquire, on its own motion, whether the proposed project "is or will be required by the present or future public convenience and necessity," as set forth in existing Section 7(e) of the NGA. Section 7(e) requires the Commission to so find. It would indeed be unfortunate if the Commission were to be precluded from acting to protect the public interest.

Second, this same section raises the question of whether the Commission's power to attach conditions to protect the public interest would be voided by this provision. The conditioning power of Section 7(e) is of extreme importance. It is through this conditioning power that the Commission can assure that, for example, the pipeline will provide open, non-discriminatory transportation.

Third, new Section 7(c)(1)(B)(ii) does not establish any standard for a new "procedure." Without more specificity, there is concern that the legitimate issues raised by intervenors may not be given a fair hearing.

With respect to Section 10010, Certificate Not Required for Replacement Facilities, we have this concern, similar to the concern that we have with Section 10001. That is the concern that the "replacement" facilities will become anti-competitive bottlenecks if Commission jurisdiction is removed.

Section 10011, Conclusive Evidence of Need, appears to preclude the Commission from inquiry into whether there are, in fact, markets for new natural gas service before allowing a pipeline to build new facilities and charge the costs plus profits to all existing customers. At present, in general, the Commission does not require any showing of "markets" when the pipeline assumes all risk of the project. This provision would thus extend the principle to cases where the customers are called upon to bear the risk rather than the pipeline.

In connection with this same section, it is assumed that the commitments for firm service is to be construed as for the entire capacity of the facility.

With respect to Section 10012, Phased Certificate Procedures, it appears that each case would be subject to judicial review twice, once at the initial final order stage and then at the final order stage. This may not result in significant expedition.

With respect to Section 10013, Procedures for Priority Natural Gas Facilities, we have to express a certain level of discomfort at the thought that electric utility boiler fuel or other fuel use of natural gas would be elevated above feedstock, process, and plant protection gas in priority. In any event, the result of a designation as a priority appears to be that other federal agencies have to act within one year.

It also appears that the Natural Gas Act in Section 19 is amended in order to give exclusive jurisdiction to the United States Court of Appeals for the District of Columbia Circuit to review even the FERC's action rather than the present situation of concurrent jurisdiction.

We tender no comments with respect to Section 10014.

VI. THE NATIONAL ENERGY STRATEGY: NATURAL GAS.

A. Introduction.

In the Executive Summary of the NES, seven topics are highlighted:

Expedite Gas Pipeline Construction;
Streamline the National Environmental Policy
Act Process Associated With Natural Gas
Pipeline Construction; Deregulate Pipeline
Sales Rates; Reform Natural Gas Pipeline Rate
Design; Improve Access to Natural Gas
Pipeline Transportation Services; Eliminate
the Department of Energy's Import and Export
Regulation; Encourage the Use of Natural Gas
as an Alternative Transportation Fuel.

NES at 11-12.

For purposes of summary discussion, three topics that are apparently not generally within the scope of S. 341 will be addressed. Those are: Deregulate Pipeline Sales Rates, Reform Natural Gas Pipeline Rate Design, and Improve Access to Natural Gas Pipeline Transportation Service. These three, taken together, encompass four elements.

(1) Deregulate the interstate pipeline sales rates. Provided that a pipeline does not have market power in the sale of gas and provided that the pipeline provides comparable services to all customers, whether they are purchasing gas from the pipeline or from other sources, the price at which the pipeline sells natural gas would be deregulated.

(2) Deregulate the interstate pipeline transportation rates where the pipeline does not have market power in the transportation function and the pipeline is providing transportation services to others comparable to the service provided when the pipeline is acting as a gas merchant.

(3) Where the interstate pipeline does have market power in the transportation function, establish a new method of setting maximum rates.

(4) Authorize capacity holders to resell capacity rights at deregulated rates where the sellers do not have monopoly power in their market areas.

B. The Two Pre-conditions in the NES are Critical.

The pre-conditions are the key to consideration of these elements. They are:

(1) the pipeline provides comparable service to third party shippers; and

(2) the pipeline (or the broker) does not have market power.

It would be most unfortunate if these preconditions were overlooked in any legislative consideration.

The purposes of these pre-conditions are summed up, as the NES clearly says, in the call for "Comparable Third-Party Transportation Service". NES at 93. In the absence of comparable service for third-parties, "a pipeline with market power could dictate lower purchase prices to producers and higher sales prices to customers by restricting access to transportation and other pipeline services." Id.

Once the first pre-condition has been met, and comparable third-party transportation service is a reality and not simply a goal, then the next step is to determine whether the interstate pipeline possesses market power in both the sale of gas and the transportation of gas. In the case of the broker, the further finding would be required that the broker not possess market power in its own markets.

The standards for determining whether or not an interstate pipeline has market power are the next key. While the FERC has experimented with determination of "market power" in the context of Gas Inventory Charges sought through the certification process by natural gas pipelines in the context of sales,¹⁰ and with the determination of "market power" in the context of transportation rates for oil pipelines¹¹, neither have been either finalized nor subjected to judicial review on the merits.

Attached hereto is Appendix B prepared by Ernst & Young outlining the basic procedures for determining market power which are apparently or may be contemplated for this determination.

This Committee is well familiar with this process, since there have been unsuccessful efforts in recent years to deregulate oil pipelines on the basis of this same basic model, and the NES brings this process back again, this time for both oil and natural gas pipelines. See, e.g., S. 1471, 101st Cong., 1st Sess. (1989).

Once both thresholds have been crossed, the consideration can be given to the services.

C. Interstate Pipeline Sales Service.

If the two pre-conditions have been met, the pipeline as merchant will be making sales of natural gas from the wellhead or the functional equivalent of the wellhead, just as competitors do. These observations are tendered on the effect of "deregulating" the pipeline sale for resale:

(1) The pipeline can buy low at the wellhead, mark up the price, and sell high to its merchant customers, thus affecting market signals for the commodity of gas between the consumer and the producer. This is no different from what a marketer of third party gas does now, but marketers are not likely to have the market share nor the control over the aggregation process that may severely disadvantage smaller producers.

¹⁰ See, e.g., El Paso Natural Gas Co., 49 F.E.R.C. (CCH) ¶ 61,262 (1989); Transwestern Pipeline Co., 43 F.E.R.C. (CCH) ¶ 61,240, reh'g granted in part and prior order clarified, 44 F.E.R.C. (CCH) ¶ 61,164 (1988), Transwestern Pipeline Co. v. FERC, 897 F.2d 570 (D.C. Cir. 1990) (opinion did not address gas inventory charge because of mootness).

¹¹ See Buckeye Pipe Line Co., L.P., 53 F.E.R.C. (CCH) ¶ 61,473 (1990), reh'g granted solely for the purpose of further consideration, Docket Nos. IS87-14-002 and OR88-3-001 (FERC Mar. 1, 1991).

(2) The pipeline may unduly discriminate in price for the commodity of gas among customers, selling at a lower price where markets are competitive and selling at a higher price where customers are more captive. The Natural Gas Act presently precludes undue discrimination. NGA § 4(b), 15 U.S.C. § 717c(b) (1988).

(3) The pipeline will have a second profit center. In the present situation, speaking generally, the pipeline is supposed to sell the commodity of gas at no more than cost. Its profits come from the inclusion in all of its rates for services of a return on equity, and an allowance in rates to cover federal and state income taxes. Thus, the basic model on which ratemaking under the Natural Gas Act has, until recently, been applied, will have a fundamental change. The question is, changed to what?

It should be noted that the FERC has already decided to deregulate the pipeline merchant function upon a finding that there is no market power and that comparable service is being offered to third party shippers. Perhaps the two major cases, both of which have not progressed to the rehearing stage as a predicate for judicial review, are: Transwestern Pipeline Co.¹² and El Paso Natural Gas Co.¹³. No opinion is here expressed with respect to these or any other cases. Our purpose here is simply to call to the attention of the Committee that the FERC apparently believes that there is no statutory impediment now to the deregulation of pipeline sales for resale in interstate commerce.

Finally, it should be considered that an interstate pipeline may be found to have market power in some markets and not in others. When this occurs, there are three possible outcomes: (a) allow the pipeline to charge whatever the traffic will bear anyway; (b) continue the requirement of just and reasonable rates for all consumers; or (c) bifurcate the markets, deregulating some and continuing regulation in others.

As will be discussed in the next section below, the NES addresses this situation in the context of transportation and opts for the third outcome. Here, as there, care must be taken to insure that the captive customers do not subsidize the rates of the non-captive customers.

¹² 53 F.E.R.C. (CCH) ¶ 61,298 (1990).

¹³ 49 F.E.R.C. (CCH) ¶ 61,262 (1989).

D. Interstate Pipeline Transportation Service.

This includes storage, transmission and gathering, access to receipt points and to capacity on other pipelines, as well as balancing. If the first pre-condition is met, customers will have free choice as to whether to buy from the pipeline as merchant or from a competitor of the pipeline for peak day, annual and long term needs as well as shorter term needs. The point of sale of gas as a commodity will be the same, whether the merchant is the pipeline or is a competitor of the pipeline.

The next step is to ascertain in which markets the pipeline still has market power, such as where a pipeline is the only access to the market, the only access route for competitors, or where a competing pipeline does not have capacity to displace the pipeline in question, to name a few examples. Where it is determined that the pipeline does not have market power, those rates are to be deregulated. Where the pipeline does possess market power, the rates are to be regulated in order to constrain monopoly power. It is to this latter subject that comments are tendered.

(1) Combination of Regulated and Deregulated Interstate Pipeline Transportation Rates on Natural Gas Act Model.

As a general proposition, the type of public utility regulation in effect under the Natural Gas Act results in a maximum rate or rates that is the same for all customers in the same class, whether they are captive to the pipeline or not. In that manner, captive customers do not subsidize the rates of the non-captive customers.

If interstate pipeline rates for transportation in interstate commerce are to be bifurcated into (a) deregulated rates, and (b) regulated rates, care must be taken to insure that the captive customers do not subsidize the rates of the non-captive customers. An illustration of how subsidies could be imposed is set forth below.

Please assume that the Commission has determined that it is just and reasonable for a pipeline to recover \$100,000,000 a year on a guaranteed basis, called a "demand charge" or "reservation fee" from its firm customers of a particular class, such as large local distribution companies. That is, the large customers will pay, in the aggregate, \$100,000,000 a year to the pipeline, whether any gas actually flows through the system or not. In this example, assume that there are four large customers, all are in the same zone or market area and that all have subscribed to 25% of the capacity and use that capacity on the three day peak of the pipeline.

In this illustration, each of the four companies would be allocated an equal amount of costs to be paid in an inescapable charge. Under the new regime, what happens when it is determined that the pipeline has market power in two out of four cases? There are, in gross, two options, as depicted below:

Allocation of Costs to Customers, to be Paid in Rates.

Customer	Status Quo	Subsidized	Correct Way
A	\$25,000,000	0	\$25,000,000
B	\$25,000,000	0	\$25,000,000
C	\$25,000,000	\$50,000,000	\$25,000,000
D	\$25,000,000	\$50,000,000	\$25,000,000

If the "subsidized" option is selected, then the captive customers, C and D, find their rates increased over the just and reasonable level because they are captive.

In order to justify any such result, an argument along these lines must be constructed and accepted by this Committee:

Proposition A: a regulated public utility is entitled to have an opportunity to recover its costs and a fair return (profit), free and clear of federal and state income taxes.

Proposition B: the rates of the public utility should be deregulated so that the pipeline can meet competition, as any free enterprise company must.

Proposition C: in some markets, competition will force lower rates. Therefore, one of two results occur; either:

- (1) the pipeline's shareholders will not enjoy the same profit level established in the rates set for public utilities; or
- (2) some captive customers will have to pay increased rates in order to keep the pipeline's shareholders whole.

Proposition D: Proposition A conflicts with Proposition C(1) and therefore must be discarded.

Therefore, it follows that the answer is Proposition C(2), and the captive customers will have to pay more to offset the lower profits in the competitive markets.

Overlooked in this reasoning is Proposition B. Proposition B is consistent with Proposition C(1); that is the name of the game in a competitive market. It is inconsistent to claim the benefits of "competition" when it suits the purpose and then to revert to being a "public utility" when the burdens of competition pinch.

If the "correct way" is chosen, the captive customers will still pay only just and reasonable rates, and the pipeline will bear the risk of collecting some or all of the allocated costs -- or even the possibility of overrecovering the allocated costs -- from A and B. This "correct way" is not new. It is a simplified model of how costs are allocated between those rates that the Commission regulates now and those rates that the Commission does not regulate, the so called "jurisdictional" and "non-jurisdictional" sales rates. If a sale or service is deregulated, it becomes "non-jurisdictional".

Therefore, the FERC would allocate \$25,000,000 each to be paid by C and D, and the pipeline, now providing "deregulated" service, will take the risk of either overrecovering or underrecovering its costs plus profits in the "non-jurisdictional" market.

(2) Combination Deregulated and Regulated Interstate Pipeline Transportation Rates on an "Incentive Regulation" Model.

The discussion above was predicated on the model of the Natural Gas Act. The NES indicates that rates that are to continue under regulation may be on a different model. As the NES states:

For markets in which a pipeline has market power, a maximum price that the pipeline may charge would be determined. To create incentives for efficiency, this ceiling price ideally would be independent of actual costs and actual revenues, possibly through price caps imposed on particular services.

NES at 94.

Insufficient detail is presently available to discuss this issue thoroughly. One construction that can be put on the above quotation is that Proposition A, discussed above, will be discarded. The interstate pipeline will no longer be guaranteed rates that will recover its costs plus a profit, after all taxes, on the projected volumes of gas to be moved. The NES is critical of the way the status quo works. NES at 94.

At this stage, it is perhaps only possible to say that any such change in the Natural Gas Act requires the most careful

scrutiny to be sure that the new system is not worse than the system that it replaces.

What the Committee, and ultimately the Congress, decides on this may well be an improvement.

E. Local Distribution Companies and Capacity Brokering

The NES addresses two basic points about local distribution companies:

(1) whether LDCs should be required to provide third party access to LDC facilities for delivery of natural gas, an issue deferred, NES at 95-96; and

(2) whether capacity rights can be resold at deregulated rates. In this case, the NES makes a distinction between the situation where the LDC has monopoly power in its own markets and where it does not, with deregulation only where there is not market power. NES at 95.

A short summary of the situation will precede discussion.

With respect to local distribution companies, including "Hinshawed" interstate pipelines which the Congress decided to place under primary State regulation (Natural Gas Act § 1(c), 15 U.S.C. § 717(c) (1988)), the current situation may be described in two parts.

First, it must be recognized that local distribution companies are basically public utility type monopolies regulated in whole or in part by the States. They may be "gas only" companies, or "combination" companies that provide both gas and electric services. One continuing problem, as this Committee well knows, is whether "open access" stops at the city gate, and customers, mainly industrial customers, are forced to be captive to that local distribution company for gas supply. This problem is sub-divided into two parts: one, whether access to the market should be provided by means of the public utilities' pipelines; and two, whether an interstate pipeline can or must provide direct access to gas supply, the so-called "bypass" issue.

Second, and directly related to the legislation pending, is the issue of brokering, or assignment, of the capacity on interstate pipelines. In large measure, this is an issue that relates directly to downstream interstate pipelines and, even more significantly, to local distribution companies.

Brokering of capacity is essentially a good policy, with one major caveat. If there is a problem now with achieving open, non-discriminatory access from the pipelines that control

capacity up to the city gates, is the problem made better or worse if the control over the interstate capacity is given to local monopolies to control? The FERC has recognized that it continues to regulate the transportation of natural gas in interstate commerce, whether the provider of the access is the pipeline, or a local distribution company is the provider of the access through brokering. But the jurisdiction of the Commission over the transportation of natural gas in interstate commerce is being challenged in court, as this testimony is given.¹⁴ One possible result is to bestow the ability on LDCs to exclude competitors by charging such high rates that captive customers of the local distribution companies will be forced to deal only with that monopoly.

Needless to say, end users may well have a dim view of this development. If the local distribution company has the dominant or exclusive control over access to interstate pipelines, for those who wish to compete with the local distribution companies, open access on the interstate pipelines will be meaningless. The monopoly -- and the monopsony -- will be transferred, albeit in a balkanized way, to local distribution companies directly and to their respective state commissions indirectly.

A customer seeking to move gas in interstate commerce would thus have to seek redress from denial of open access or the oppression of monopoly rents, not at the FERC, but at the location of the State Public Utility Commission. Indeed, the State Commission would control access to interstate pipelines from their origin points in other States, thus turning the Commerce Clause on its head.

This problem is perhaps most acute right now in a clash of wills between the California Public Utility Commission and the FERC regarding brokering of interstate transportation capacity. For example, the CPUC is conducting a rulemaking proceedings involving interstate capacity brokering, R.88-08-018 (instituted Aug. 10, 1988), independently of ongoing proceedings at the FERC involving the brokering of that very same interstate capacity. If the California PUC prevails, the effective reach of State jurisdiction would not be at the California border, but at a line far beyond the eastern border of New Mexico, somewhere between

¹⁴ Texas Eastern Transmission Corp., 48 F.E.R.C. (CCH) ¶ 61,248 (1989); order amending blanket certificate, 48 F.E.R.C. ¶ 61,378 (1989); order on reh'g, 51 F.E.R.C. ¶ 61,170 (1990); order on deferred issues, 52 F.E.R.C. ¶ 61,273 (1990); appeal filed sub nom., Associated Gas Distributors v. FERC, D.C. Cir. No. 90-1261 (appeal filed May 21, 1990) (per curiam order holding case in abeyance pending completion of agency proceedings issued October 31, 1990).

Midland, Texas, and Oklahoma City, Oklahoma, with connections north through the mountain and plains states, and east through the Gulf coast states. A decision of the Commission relating to this subject is expected shortly.¹⁵

The same potential situation now exists from New York westward to Louisiana and Texas, on the Texas Eastern Transmission Corporation system, with connections through Arkansas to the midwest and back through Ohio on systems affiliated with Texas Eastern.¹⁶

Perhaps the Committee will choose to leave this subject to the respective Commissions and the Courts to sort out.

The Court of Appeals for the D.C. Circuit has recently resolved a dispute between the California Public Utility Commission and the FERC over who controls interstate pipelines constructed under the Optional Expedited Certificate Procedures, holding for the FERC.¹⁷

In making these comments, we do not wish to be understood as being critical of the role of state regulation of the local monopolies. Indeed, with an appropriate brokering system established on the interstate pipelines under FERC control, we anticipate that some or all of the State Commissions will be valued allies, inducing the local monopolies to maximize the brokering of capacity pursuant to the standards set by, and administered by, the FERC, even when the local monopoly would prefer to withhold capacity for anti-competitive reasons and the FERC, for whatever reason, does not or will not act to compel compliance with open access conditions. This is the best of federalism, a concatenation of federal and state regulation, each in their own sphere.

The NES addresses one aspect of this situation, and that is the rates to be charged for the resale of firm capacity:

¹⁵ El Paso Natural Gas Co., Docket No. CP88-433-001 (application filed Aug. 31, 1990).

¹⁶ Texas Eastern Transmission Corp., 48 F.E.R.C. (CCH) ¶ 61,248 (1989); order amending blanket certificate, 48 F.E.R.C. ¶ 61,378 (1989); order on reh'g, 51 F.E.R.C. ¶ 61,170 (1990); order on deferred issues, 52 F.E.R.C. ¶ 61,273 (1990); appeal filed sub nom., Associated Gas Distributors v. FERC, D.C. Cir. No. 90-1261 (appeal filed May 21, 1990) (per curiam order holding case in abeyance pending completion of agency proceedings issued October 31, 1990).

¹⁷ Public Utilities Comm'n of the State of Cal. v. FERC, 900 F.2d 269 (D.C. Cir. 1990).

"Unless a pipeline's customers have monopoly power in the market for rights to firm pipeline capacity, customers should be allowed to resell firm capacity to others at unregulated prices." NES at 95.

This proposition assumes that the FERC has jurisdiction over the rates, terms, and conditions for the transportation of natural gas in interstate commerce, whether the seller of the service is a pipeline or the pipeline's assignee. As previously stated, Court review is pending on whether the FERC can exercise any jurisdiction at all over the rates, terms and conditions charged by brokers. See Texas Eastern case, supra. These "brokers" are mainly LDCs, as the NES recognizes. NES at 95.

Should the Courts find that the FERC lacks jurisdiction, then either (a) the FERC may wish to reconsider whether to allow brokering at all or (b) the broker can rent capacity on interstate pipelines for any rate it pleases, whether it has monopoly power in its market or not. The Committee may wish to resolve this question by reaffirming FERC jurisdiction.

If the FERC does have the necessary jurisdiction over the rates, terms and conditions of transportation in interstate commerce, apparently the NES would remove this jurisdiction when the LDC is found not to have monopoly power in the market.

If, as most likely would be the case, an LDC does enjoy a franchised monopoly for natural gas in its market area and is given exclusive control over the interstate pipeline's firm capacity to reach the LDC's service territory, then the inquiry on the existence of market power should be short.

It would be counter-productive to restrict the exercise of monopoly power of the interstate pipelines and then institutionalize the same monopoly power at the LDC level.

VII. CONCLUSION.

In sum, the questions before this Committee are extremely significant and far reaching. This is no mere incremental fix or minor adjustment at the fringes of statutes. The character of the entire gas industry, from wellhead through the burner tip or manufacturing process will be set, one way or another by the pending legislation.

It is our hope that the character of the gas industry will be one of a national interstate transmission grid, regulated uniformly but only to the minimum extent necessary to prevent abuse of market power, whether monopoly or monopsony in nature, so that a free market for the commodity of gas can be achieved with open, non-discriminatory and comparable service, both in quality and price, from the wellhead to the ultimate consumers.

Appendix A

Comments on Title X of S. 341, following the Summary Attached to Senator Johnston's Letter of February 21, 1991

Title X -- Natural Gas

Optional Procedures for the Construction of Natural Gas Facilities (Section 10001).

Our Primary concerns with this Section 10001 are covered in the testimony. Additional comments are here tendered.

By Section 10001(b)(2), the definition of "transportation service", note is taken that the new interstate pipeline is a "transportation only" pipeline, not a pipeline used to make sales for resale or direct sale in interstate commerce at the terminus of the interstate pipeline built under Section 10001. This is a very important point and should be preserved. By requiring the sale of the commodity of gas to take place prior to the transportation over the Section 10001 pipeline, the interstate pipeline will not be able easily to avoid the proscription on "rate base treatment" provided in subsection (d) nor to avoid the requirement of subsection (c)(1)(iv) that the rate be established on a stand alone and incremental basis.

Subsection (d) on Rate Base Treatment places a ten year moratorium on shifting the costs of a Section 10001 pipeline to existing customers. While this is positive, the question is: should these costs ever be eligible to be rolled into the costs of existing customers? The facilities are not, or apparently not, to be available for their use. In this connection, it should be clarified that the Commission has the ultimate say in what costs can be "rolled in", even if the present draft remains intact.

Transportation of Natural Gas Under the NGPA (Section 10002).

Our comments are contained in the testimony.

NEPA Compliance (Section 10003).

We have no comments and would respectfully recommend adoption.

Rates and Charges (Section 10004).

We have no comments, other than those expressed in the testimony, and would respectfully recommend adoption.

These are very significant improvements over the status quo. With the advent of open access transportation, carrying with it substantial progress but not yet achievement, the pipelines have a real advantage in setting and placing into effect rates for itself as merchant and for its competitors, and the Commission presently has inadequate power to deal with this problem. For example, at the end of the rate process, the Commission may decide that rates are unjust and unreasonable for shippers as well as for sales customers, but the present Section 4 can operate to provide refunds only to one class or the other, depending solely on how the pipeline chooses to file for new rates. Thus the pipeline may collect, and retain, rates and charges which the Commission had determined to be unjust and unreasonable and unduly discriminatory. With this statutory change, the Commission can insure that no customer is forced to pay more than the just and reasonable rate from the time that the rates go into effect. The burden is properly placed on the pipeline to establish that all of its rates are just and reasonable, not just some of them, as the status quo now permits.

The additional thirty days notice is also an improvement, since the present thirty days is hardly time to digest the several volumes of telephone directory sized schedules of claims by the pipeline and provide the Commission with a careful analysis of perceived problems.

Utilization of Rulemaking Procedures (Section 10005).

As the testimony indicates, this provision, along with the NEPA compliance reform, may achieve the expedition desired in the construction of new pipeline projects.

Review of Commission Orders (Section 10006).

Review of Commission Orders (Section 10006). We have no suggestions to make and respectfully recommend adoption. As a comment, the present statute unequivocally states that the Commission has thirty days to act on rehearing, but this statutory mandate has been successfully evaded for years and years. The result is to deny a party a meaningful right to judicial review, except through extraordinary means, rarely sought or granted. Whether intended or not, the result is an effective denial of due process of law.

Limited Antitrust Relief for Independent Gas Producer Cooperatives (Section 10007).

We have no suggestions and respectfully recommend adoption. As a comment, we express no opinion one way or the other as to whether such conduct now would be a violation of the antitrust laws, but codification would remove any doubt.

Vehicular Natural Gas Jurisdiction (Section 10008).

We have no suggestions and respectfully recommend adoption. As a comment, we express no opinion as to whether or not this section is actually needed, but codification would remove any doubt.

National Practices Group/Utilities

A Review of the FERC's Current Methodology For Determining Market Power

This review serves as a broad overview of the methodology used by the FERC in determining whether pipelines have market power as evidenced by the Commission's decisions in Buckeye and El Paso. Buckeye Pipe Line Co., LP, 53 F.E.R.C. (CCH) par. 61,473 (1990). El Paso Natural Gas Co., LP, 49 F.E.R.C (CCH) par. 61,262 (1989).

Not within the scope of this review are the options which follow a determination that there is or is not market power. For example, with a determination that there is no market power at all, the options range from deregulation to some form of "light handed" regulation, subject to any legal constraints. Conversely, with a finding that there is market power, there are also a range of options, from cost of service with fully allocated costs to some form of surrogate regulation, again subject to any legal constraints.

The FERC's methodology is derived, to a large extent, from prior work of the Antitrust Division of the Department of Justice in its examination of oil pipelines. (May, 1986; Report of the U.S. Department of Justice Oil Pipeline Deregulation). DoJ's oil pipeline methodology is, in turn, an adaptation of the methods used to evaluate mergers in order to apply the method to regulated pipelines. In general, the DoJ applied the methodology discussed below and concluded that some oil pipelines had an unacceptably high market power in some of their markets and, hence, that continued regulation was necessary.

The DoJ's report on pipeline deregulation emphasizes a five-part process to evaluate pipeline deregulation in general. The five components of the DoJ's methodology are: (1) the determination of the relevant market; this includes an assessment of the relevant product and the relevant geographic market; (2) an assessment of the concentration within the market (It is important to note here that market power can exist in a market that is not deemed to be highly concentrated. In the past, market concentration was weighed so highly that it became the dominant factor in the DoJ's decision process); (3) the likelihood of entry into the market is analyzed; (4) other competitive factors that might affect the likelihood of successful collusion are evaluated; (5) any efficiency benefits, primarily cost savings, are analyzed. These five elements are balanced and a decision is rendered.

By definition, market power is the ability of a pipeline to raise prices above the competitive level for a significant period

of time. In the Buckeye case, the ALJ stated that significant market power is the ability to control market price by sustaining at least a 15 percent real price increase, without losing sales, for a period of at least two years. It is important to note that the DoJ merger guidelines refer to a 5 percent nominal price increase. However, in practice, a 10 percent nominal price increase is utilized by the DoJ and the FTC in merger analysis. The process of determining the relevant market includes defining the relevant product and the relevant geographic market. These critical factors are usually the focus of a great deal of controversy as pipelines and others argue whether all energy sources or just firm sales comprise the relevant product; or if the entire continental U.S. or just a particular local geographic area (such as the Bureau of Economic Analysis Economic Area) constitutes the relevant geographic market.

Once the relevant product and the relevant geographic markets are identified, the DoJ guidelines focus on the determination of seller concentration within the relevant market. To do this the DoJ guidelines use the Herfindahl-Hirschman Index (hereafter HHI) to calculate the relative concentration within the market. The HHI is calculated by squaring the market share of each of the competitors within a market and summing them together. If the index is above a predetermined threshold level, then the market is deemed to be highly concentrated. A highly concentrated market is thought to be likely to result in collusion between the "competitors" or a single firm with excessive market power. The DoJ's merger guidelines set an HHI of 1,800 as a threshold level demanding greater scrutiny of the merger. In the case of oil pipelines, however, the DoJ's guideline suggests a threshold of 2,500 would be appropriate.

For example, the HHI of a single firm market would be 10,000 $[(100\%)^2]$. A market with two equal size firms would have an HHI of 5,000 $[(50\%)^2 + (50\%)^2]$. Finally the HHI of a market with four equal size firms would match the DoJ's threshold of 2,500 $[(25\%)^2 + (25\%)^2 + (25\%)^2 + (25\%)^2]$.

In the Buckeye case the FERC following the DoJ's guidelines determined that the relevant product market was "the transportation of refined pipeline petroleum products." The determination of the relevant geographic market was a little more difficult to define. The FERC did, however, decide to use the Bureau of Economic Analysis Economic Areas (BEA's) in which Buckeye operated rather than the airports that Buckeye serviced. The FERC's decision to use the BEAs resulted in 10 BEAs defined and 10 HHIs calculated. In four of the BEAs Buckeye was judged to have significant market power; in four other BEAs Buckeye was judged not to have significant market power. In the last two BEAs the results were inconclusive. In making judgments about the market power wielded by Buckeye the FERC calculated HHIs ranging from a low of 1400 to a high of 5378. Due to the FERC's reliance on the DoJ guidelines methodology, the Commission ruled that "light handed" regulation was appropriate in the competitive markets but not in the

noncompetitive markets. Some transitional regulations were found to be appropriate in this case.

The El Paso case uses the same DoJ methodology, however, the dimensions are more complicated because the FERC focused on El Paso sales while making complex assumptions regarding receipt and delivery points. In general, the FERC concluded that the relevant product market was, in fact, delivered firm gas on peak day.

As for the relevant geographic market, the FERC reviewed three possible scenarios. In essence three areas of gas supplies were considered: (1) the counties in the three basins where El Paso purchases gas that are already connected to the El Paso system, (2) all counties in the three basins, and (3) all counties from which El Paso purchased gas in 1987, including counties outside the three basins. The FERC ruled that El Paso's relevant geographic market "was that geographic market containing those suppliers that can affect any attempt by El Paso to exercise market power and excluding those suppliers that cannot. [In addition], the supplier must not be committed to other buyers for longer than one year." The Commission goes on to point out that El Paso's relevant geographic market includes the following:

- 1) the delivery point (locations) at which the customer receive the gas onto their distribution system (i.e. the city - gate for an LDC).
- 2) The location of the supplier that could supply to these delivery points within one year at a price competitive enough to prevent El Paso from exercising significant market power.
- 3) The pipeline routes that connect the supply area in (2) to the delivery points in (1).

To determine the concentration in the market, and hence the potential for market power, the Commission decided to measure El Paso's HHI at both the receipt and delivery points for its delivered firm gas. After defining the relevant market, the Commission utilized the HHI method to determine that there was not a significant degree of concentration in any of the supply basins attached to the El Paso system.

The Commission also measured the degree of concentration at the city-gate, or delivery points, for the El Paso system. After calculating the HHIs, the Commission concluded that the adjusted peak-day HHIs for individual customers and the adjusted non-coincidental peak-day HHI for all non-exempt customers was not above the 2,500 threshold established by the DoJ; hence, the Commission determined that there was not a significant level of concentration in these markets.

As a result of the Commission's use of the DoJ's guideline and methodologies, it was concluded that El Paso did not exert market power in any of the relevant markets and, thus, competition was adequate.

The CHAIRMAN. Thank you very much, Mr. Graham. Mr. Graham, I wonder if your concerns about the noncertificate option could be met if we provided for open access.

Mr. GRAHAM. I am not sure. I have to look into that. Want me to get back to you on that?

The CHAIRMAN. Excuse me?

Mr. GRAHAM. Would you like for me to get back to you on that?

The CHAIRMAN. Yes. Would you, please?

Mr. GRAHAM. Okay.

The CHAIRMAN. Are you familiar with what was provided, proposed in the NES on open access?

Mr. GRAHAM. In the NES?

The CHAIRMAN. In the DOE proposal. They provided, proposed mandatory interconnect on the producer end. But you can get back to us in writing—

Mr. GRAHAM. Okay, fine. All right.

The CHAIRMAN [continuing]. If you would like to. It seems to be that that mandatory interconnect is one of our principal problems here, one of our principal issues, should I say. Mr. Kuehn, are you as concerned about that as you are about section 4 refund obligation?

Mr. KUEHN. Yes, sir, I am. I think the mandatory hook-up on the surface may sound like an answer to some of the problems and some of the concerns expressed here today by Mr. Graham. But it also should cause some great problems for distribution companies such as Brooklyn Union, and may not necessarily be in the interests of the producing community, because the producing community may not necessarily realize a greater net back by avoiding distribution company charges. That probably would be captured, so long as we have a surplus by Mr. Graham and Union Carbide and the consumer.

I do not think that legislation should deal with mandatory hook-ups until they have a full realization, again, of what those consequences might be to the ultimate consumer, the residential consumer, the commercial, small commercial consumer, who are basically captive customers of distribution companies.

The CHAIRMAN. Now, the language, DOE's language would say, if submitted to us, would provide that the Commission shall have no authority to compel mandatory hook-ups, when to do so would impair its ability to render adequate services to its customers. Would that not—

Mr. KUEHN. I do not think it deals—

The CHAIRMAN [continuing]. Take care of your concerns?

Mr. KUEHN. I do not think it deals, Senator, with the financial impacts of mandatory hook-up. The costs involved, albeit they are complained of here today and elsewhere and practically everywhere, are costs which have been found to be just and reasonable by the Federal Energy Regulatory Commission. If, indeed, those costs are just and reasonable for transportation charges, then they have to be borne by someone.

To the extent a large industrial user, indeed, anybody, thinks they can avoid some costs by avoiding, for example, distribution company charges with direct hook-ups to pipelines, then those costs have to be shifted to someone. And the someone would be the resi-

dential and commercial consumer, assuming they are just and unreasonable, and I assume they are.

So I think you have to be careful about that.

The CHAIRMAN. Well, the DOE proposal is for the production end only, and not, would not permit bypass.

Mr. KUEHN. Well, I think they—I do not think that mandatory hook-up necessarily is the answer to the problem, whether it, be it the production end or the consuming end.

The CHAIRMAN. Well, Mr. Steward, you like the mandatory hook-up. Would you like to deal with Mr. Kuehn's concerns?

Mr. STEWARD. Well, I do not know if I can deal with it in detail, because I am probably not as familiar with his end of the business as with the others. But I just think philosophically that it makes sense that we can get more producer gas to the market if people have open access and can hook into the system and then deal directly with some of the potential end-users.

I think that will ultimately lower the cost to the consumer on the other end, just looking at it philosophically.

The CHAIRMAN. Well, I wish you all would deal with this language that DOE has proposed, because I think this is one of the most important issues here. We understand that to be only on the producer end. I saw Mr. Gooch shaking his head back there.

Did you think it would permit bypass, Mr. Gooch?

Mr. GOOCH. Yes, sir, I do think it would permit bypass, mandatory bypass.

The CHAIRMAN. Well, we, speaking for myself, at least, I am not interested in a proposal which would provide mandatory hook-ups where it would bypass. We understand DOE's proposal to be only at the producer end, to get access to deliver gas to the pipeline. And we believe, at least I am prepared to believe that this language that says they have no authority to compel the hook-up when to do so would impair its ability to render adequate service to its customers. It is intended to deal with your concerns, Mr. Kuehn. And if that language can be improved or if you would like to comment further on that, we would like all witnesses to do so, because this will be one of our principal measures to resolve.

We hear what you say about section 4 on refund obligations, and we will take that to heart.

Mr. Steward, how competitive do you think gas markets are?

Mr. STEWARD. I think that gas markets could be more competitive if we see put in place exactly what we have been talking about today. I am very heartened that everyone in general is talking about making the system more efficient and greater access to all parties.

I think that the problems with how competitive it is today stems from the fact that we do have certain areas that have concentrated market power, and I think by definition that would suggest that maybe competition is not wide open there. I think a lot of the improvements, as far as open access are concerned, will specifically stimulate additional competition in that area. And I think the consumer will ultimately win out.

The CHAIRMAN. Mr. Kuehn, how competitive do you think markets are?

Mr. KUEHN. I am very skeptical, Senator, with respect to the deregulation promise held out in the NES, because it says it is based on markets, or it is based on markets where the pipeline does not have market power. Well, this industry has grown up basically as a monopoly, or a monopsony. And there are very few markets that I am aware where there are three or four pipelines, where the test for a competitive market by the Justice Department would be met.

And that is particularly true at peak times, where, so I do not think the markets are truly competitive in the sense of, that the Justice Department might think of being truly competitive, and would justify total deregulation. I do not think it is there.

The CHAIRMAN. Well, there are certainly orders of magnitude more competitive than they were.

Mr. KUEHN. Absolutely.

The CHAIRMAN. But I do not know how we ever get there where you have a truly competitive market, given the size of the investments in pipelines. Mr. Graham—

Mr. KUEHN. You build a lot of unnecessary pipelines if you are going to get the—

[Laughter.]

The CHAIRMAN. Do you agree with that?

Mr. GRAHAM. I agree with you, yes.

The CHAIRMAN. Mr. Catell, do you agree with it?

Mr. CATELL. Well, I think gas markets are very competitive. We may be in a unique position in that we happen to be supplied by a number of pipelines, so we have a number of choices. And I guess looking at it from the distribution company side, the market place, you know, we see a lot of competition even in today's world for natural gas to serve the markets that we serve, whether it be through oil or electricity or other means.

So we think the natural gas market place is quite competitive today. Not that there cannot be more things done to give distribution companies additional choices.

The CHAIRMAN. I was pleased to read your comments, Mr. Steward, about PUHCA reform provisions, which we are not principally talking about. Some people whom I respect in the gas business think that with Public Utility Holding Company Act reform, that natural gas can be a fuel of choice for electric generation.

The reason being, that it could be used for that is that the big risk there would be on the stability of the market, the availability of the fuel at guaranteed prices. And I understand it can be made available now for up to 15 years at guaranteed prices. Is that your understanding, first of all, about the guarantee of the prices, whether those kind of prices are available?

Mr. STEWARD. Well, I guess—I'm sorry—

The CHAIRMAN. And whether or not, then, that PUHCA reform would help in the promotion of natural gas as a fuel for electric generation.

Mr. STEWARD. I guess that every producer would have to speak for himself as to whether he would enter into a 15-year contract at some fixed price, or price that had an escalator in it, or that was tied, market plus a few cents or a few dollars or whatever. So I could only speak for ourselves.

We certainly look at the possibility of signing long-term contracts. Gas is so far in the tank on prices right now that one is a little reluctant to jump out and get into 15-year contracts, because we are just barely able to make it on our natural gas investments or reinvestments to find more gas right now.

Relative to generating more market, as I understand the PUHCA reform, and I do not claim to be an expert in this area either. But if it will just allow more electric generating companies to come into existence, intermediate size, smaller size, or whatever, I think almost by definition that will expand the natural gas market.

We know that natural gas is the fuel that can most quickly go into a new plant, and that also it requires less capital investment on the part of these intermediate size or smaller size generating plants. I see that as a real good potential source for people to sell natural gas, and use natural gas.

The CHAIRMAN. It will not allow more to get in, but it would be a device for shifting risk, keeping in mind that electric generating utilities are under the jurisdiction of the public commissions. And they in turn do not want to take any risk. Whereas a IPP or EWG would be able to assess that risk, take it as a market matter, and give them, give the utility a fixed cost at least for a fixed time, assume the risk itself, and also the possibility of the profit.

And I see that as being a very strong reason for people in the natural gas business to support PUHCA reform. The possibilities of bringing more competitive market, broader use of fuels, allowing the building of central station electric generation facilities of all kinds, I think, offers great promise.

So I hope those in the natural gas market will agree with that and will help us on that particular provision.

The CHAIRMAN. Gentlemen, if you have nothing further to add, I would appreciate getting your comments on those matters we discussed. We will have further written questions, and, to be printed in the hearing record, supplemental testimony must be submitted within 1 week. So if you have something further for us, please let us have it within 1 week.

Thank you very much. You have been an excellent panel.

[Whereupon, at 12:20 p.m., the hearing was adjourned.]

[The following statements were submitted for the record:]

Statement for the Record
by
David O. Webb, Senior Vice President
Gas Research Institute
for
Committee on Energy and Natural Resources
S. 341--National Energy Security Act, Title VI
Sections 6003 and 6004
For Hearing of March 7, 1991

GRI appreciates the opportunity to submit testimony for the record regarding Title VI Sections 6003 and 6004 of S. 341, the National Energy Security Act. Section 6003 addresses research and development in the areas of natural gas utilization technologies, and Section 6004 provides for a program in natural gas supply enhancement.

Gas Research Institute (GRI) is a not-for-profit organization of the natural gas industry with 320 members. GRI plans, manages, and develops financing for a research and development (R&D) program designed to advance gas supply, transport, storage, and end-use technologies and to conduct related basic research. The funding mechanism for the program is based on the volume of sales and transportation services of GRI's members and is subject to annual review and approval by the Federal Energy Regulatory Commission and, where appropriate, by state regulatory agencies.

The program includes almost 500 active contracts with leading performers of R&D. The flow of new products, processes, and information resulting from GRI's R&D investments provides substantial savings and other valuable benefits for the gas industry and its ratepayers. Manufacturers, gas pipeline and distribution companies, gas producers, service companies, government agencies, major energy users, and R&D contractors join with GRI in the support of projects of special interest. This cooperation enhances the cost-effectiveness of the program and the practicality of its results.

S. 341

GRI supports the philosophy of having a national energy plan and applauds Senators Johnston and Wallop in their development of legislation to address the continuity and security of this nation's energy sources. Of particular interest to GRI are the sections on research, development, demonstration, and commercialization activities. Particularly noteworthy is the recognition that cooperative agreements by the federal government, private industry, universities, and national labs add financial resources and expertise and are a viable way to facilitate the technology transfer needed to move technologies into the marketplace quickly and economically.

GRI would like to comment on Sections 6003 and 6004 of S. 341. These two sections, Natural Gas End-Use Technologies and Natural Gas Supply Enhancement, cover programs where GRI has extensive R&D experience already. In fact, in some cases, GRI and the federal government already have cofunded or cooperative programs. GRI's experience in these endeavors may be helpful to the Committee as it marks up and refines the pending legislation.

COOPERATIVE AGREEMENTS

As indicated in this legislation, the preferred approach to research and development is through cooperative agreements with industry cofunding. GRI endorses this approach and is ready to accept the challenge to cofund cooperative R&D ventures with the Department of Energy. Under the cooperative R&D venture concept, once the project scope of work and cost parameters have been negotiated, the government relinquishes daily management control in exchange for 50 percent cofunding from private partners. Through the industry's willingness to invest its own resources (at least 50 percent of the project funding), the government is paying less than half the cost of a project that it judges to be in the public interest.

In GRI's experience, cooperative agreements show many advantages beside the obvious one of leveraging resources. These advantages include an increase in information from industry and government teams; complementary abilities; rapid transfer of technology; bridging the gap between public and private funding; and finally, it works. Chart 1 shows the level of joint funding GRI has experienced in selected years with both the federal government and industrial partners. The figures on this chart are over and above GRI's R&D expenditures, thereby significantly increasing the annual expenditures for natural gas research.

While the use of cooperative agreements may be successful in most cases, the Committee needs to be mindful that there are some instances when 50 percent cofunding from industry may not be realistic. In the case where the research is very basic or is deemed to be long-term, industry may not see payback from such a contribution. An example would be in surface coal gasification where the technology is not expected to come into the marketplace until the long term, and the costs would be extremely high. In some cases, a lesser percentage of cofunding may have to be acceptable.

GRI recommends the following general guidelines for cooperative agreements and cofunding:

- o Section 6003. Fifty percent cofunding should be required for all natural gas end-use technologies that have reached the proof-of-concept stage of development and are ready to proceed to prototype development and testing. For technologies that have not reached proof of concept, industry should fund 20 percent.
- o Section 6004--Natural Gas Supply Enhancement field-based activities in coalbed methane, tight sands, Eastern shales, and secondary gas recovery should require 50 percent cofunding from industry. More fundamental and speculative research in geopressurized reservoirs, methane hydrates, and gas from biofuels should require minimum amounts of cofunding.

Funding Authorizations

GRI recommends that funding be authorized for Sections 6003 and 6004 research activities as shown in Table 1. The levels of GRI funding in these same technologies is shown to indicate the gas industry's commitment to cooperatively fund research for end-use technologies that have reached the proof-of-concept stage and for field testing gas supply technologies.

Justification and detailed research agendas are presented on the following pages of the testimony.

Chart 1
GRI
JOINT FUNDING
(\$ Millions)

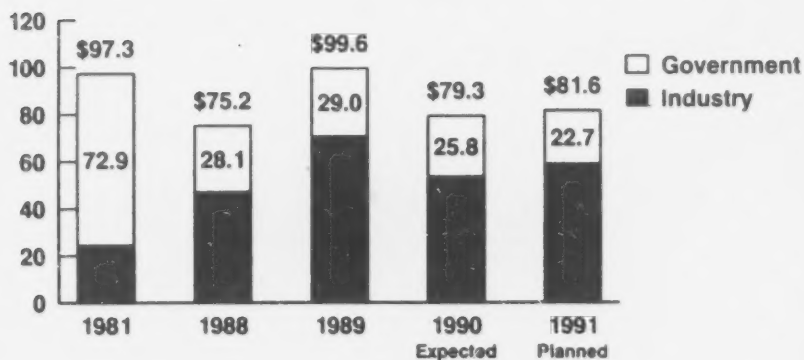


Table 1
Recommended Funding Authorizations
(\$ Millions)

	FY 1992	FY 1993	FY 1994	GRI 1992
Section 6003, End-Use				
o Gas Cofiring/Reburn	\$ 6.5	\$ 6.5	\$ 6.5	\$ 6.5
o Gas Heat Pumps	7.5	7.5	7.5	13.6
o Gas Desiccant Cooling	3.0	3.0	3.0	4.5
o Heat Engines/Gas Turbines	10.0	15.0	15.0	5.4
o Industrial Processes	10.0	10.0	10.0	16.4
o Natural Gas Storage	3.0	3.0	3.0	1.5
o Natural Gas Vehicles	25.0	10.0	10.0	7.3
o Electrochemical Conversion/ Fuel Cells	40.0	30.0	25.0	4.0
Total	\$105.0	\$85.0	\$80.0	\$59.2
Section 6004, Natural Gas Supply				
o Conventional Reservoirs	\$ 3.0	\$ 3.0	\$ 3.0	\$ 5.0
o Unconventional Reservoirs	21.2	23.5	24.5	40.0
o Geopressurized Reservoirs	10.0	10.0	10.0	0.0
o Coal Gasification	8.5	8.5	8.5	1.0
o Methane From Biofuels	8.0	8.0	8.0	1.5
Total	\$50.7	\$53.0	\$54.0	\$47.5

Following is a discussion of some of GRI's current technologies and some suggestions for cooperative programs which fall within the parameters of this legislation.

SECTION 6003

Stationary Source Emissions Control and Efficiency Improvements

1. Gas Reburn/Sorbent Injection (GR-SI). Under Round I of the Clean Coal Technologies Program, GRI, DOE, the State of Illinois, and Energy and Environment Research are testing a GR-SI technology on a utility boiler at Illinois Power's Hennepin Station and Springfield City Water, Light & Power's (Illinois) Edgewater Station. First results on the effectiveness of gas reburning (GR) have been obtained at Illinois Power's Hennepin Unit 1. This unit is a tangentially fired 80 MW boiler fired with high-sulfur coal. This test is a field evaluation of GR-SI to reduce NO_x and SO_2 from coal-fired utility boilers by firing 15-20 percent natural gas to create a slightly reducing environment downstream of the primary combustion zone for NO_x reduction. Using 16-18 percent natural gas at 65 MW load, NO_x concentrations were reduced from the baseline level of 450 ppm to about 132-165 ppm, a 63-66 percent reduction. This degree of reduction, if sustainable, would enable tangentially fired boilers to meet limits recommended in the Clean Air Act Amendments for NO_x reductions. A roughly 20 percent reduction of SO_2 was measured as a result of gas reburning. The sorbent injection portion of the technology for SO_2 capture was started up in January 1991. Testing both reburn and sorbent injection will continue for nine months. This technology is seen as a possible least-cost option for smaller coal-burning units with relatively low capacity factors on older plants with fewer years remaining in their operating lives.
2. Reburn. This technology is being funded in a joint program with GRI, EPRI, the State of Ohio, and the Department of Energy at the Niles Station of Ohio Edison. During reburn, natural gas is injected into a zone beyond the primary combustion zone to create a natural-gas-rich reburn zone. Over-fire air is added in the final burnout zone to complete the overall combustion process. In this reburn zone, much of the NO_x present is converted to elemental nitrogen. The installation of the reburn system was completed in June 1990. Evaluation of the control system was completed in October, and parametric testing was completed in December. Preliminary results at full load indicate NO_x reduction at approximately 60 percent using 20 percent gas. The reburn system was inspected during a December outage. Testing of the reburn system will continue in 1991.
3. Reburn/Low- NO_x Burners. In another Clean Coal Technology project, GRI, EPRI, DOE, Colorado Interstate Gas and the Public Service Company of Colorado (PSCo) began a project in October 1990 to install low- NO_x burners and gas reburn on a 172 MW wall-fired boiler at PSCo's Cherokee Station. First phase design is in progress, and construction is expected to begin during an August outage. Testing is scheduled for the second quarter of 1992.
4. Basic Cofiring. In a cooperative program, Southern Indiana Gas & Electric (SIGECO), Alcoa, DOE, and GRI will conduct a basic cofiring test at SIGECO's Warrick Station. The purpose of the project is to identify SO_2

control capacity factors, and coal types for the most economic/pollution control benefits. Preliminary cofiring designs and economic analysis have been submitted. Alcoa and SIGECO submitted a permit application to the State of Indiana in December to modify the boilers. The earliest possible completion date for the 150 MW unit is October 1991.

5. Absorption or Adsorption Residential Gas Heat Pumps. By extracting heat from the outside air and transferring it to the indoor space, gas heat pumps can actually supply more thermal energy than is contained in the input fuel. The gas heat pump's cooling effect is accomplished by reversing this process. The gas heat pump thus provides heating and cooling in a single unit.

Current performance estimates suggest that in heating, the gas heat pump could save one-half of the gas used in a conventional furnace and one-quarter of the gas used in a high-efficiency furnace. Furthermore, these devices offer the potential for lower resource energy consumption than systems powered by electricity produced from fossil fuels or nuclear energy. The major thrust needed is to develop an advanced residential gas heat pump with the following characteristics: cooling capacity of 2 to 3 tons at 95 degrees Fahrenheit; heating capacity of 50,000 to 90,000 Btu/hour at 47 degrees Fahrenheit; minimum COP for heating of 1.8 at 47 degrees Fahrenheit; minimum COP for cooling of 1.0 at 95 degrees Fahrenheit; installed cost goal of \$4,900 (1989\$); maximum electrical parasitics of 600 W; service life of 13 years (more than 40,000 hours). A DOE/GRI cooperative program is required. DOE funding of \$7.5 million is needed in FY 1992, FY 1993, and FY 1994. GRI will match the DOE funding.

6. Chemi-Sorption Residential Gas Heat Pump. The major task needed to further develop this technology is an advanced residential gas heat pump system based on chemi-sorption technology with the following characteristics: cooling capacity of 2 to 3 tons at 95 degrees Fahrenheit; heating capacity of 60,000 Btu/hour at 47 degrees Fahrenheit; minimum COP for cooling of 0.9 at 95 degrees Fahrenheit; minimum COP for heating of 2.0 at 47 degrees Fahrenheit and 1.4 at 17 degrees Fahrenheit; installed cost goal of \$4,900 (1989\$); maximum electrical parasitics of 800 W; minimal maintenance; and a service life of 20 years.
7. Gas-Only Desiccant Cooling Systems. Desiccant materials have been applied in cooling cycles, paralleling the performance of conventional residential and commercial electric cooling equipment. Desiccant cooling cycles also do not require the CFC/HCFC refrigerants in use with existing electric vapor compression systems. Desiccant cooling cycles also have the inherent ability to control temperature and humidity independently. Such control of humidity can help avoid indoor air health hazards such as the growth of airborne bacteria and fungi.

Recommendations for research include development of liquid desiccants, solid desiccant composite materials, solid desiccants formulated into structural load-bearing shapes, and the engineering of desiccant performance. These avenues of technology development would complement and strengthen the current gas industry RD&D program and would contribute to the competitiveness of this technology for environmentally sound, energy-efficient residential and commercial cooling. A DOE/GRI 50-50 funded program is required. Funding of \$3 million annually from each partner is needed in FY 1992, FY 1993, and FY 1994.

8. Heat Engines/Gas Turbines. Converting the chemical energy in fossil fuels to electricity and shaft power is a major component of the overall U.S. energy picture. This type of energy conversion is accomplished with a range of processes and equipment that includes large-scale electric utility and onsite industrial power plants and smaller industrial and commercial cogeneration systems.

Natural-gas-fueled power generation systems can provide gas consumers with cost-effective alternatives to coal- or petroleum-fueled technologies while helping to ensure compliance with environmental regulations. Gas-fueled systems in this category include engine-driven cogeneration, machine drive, and electric power generation systems. R&D issues, depending on the type of system, include fuel efficiency, first cost, emission control, durability, reliability, extension recovery, connection to the electric utility grid, flexibility to respond to changing thermal and electric power demands, safety, and integration of advanced controls and diagnostic systems.

Heat engines can contribute positively to the environment and to energy conservation. Research and development to develop high-efficiency natural-gas-powered turbines in a wide array of sizes for electric generation should include steam-injected gas turbines (STIG), intercooled steam-injected gas turbines (ISTIG), and chemically recuperated reheat gas turbines (IR-CRGT), as well as low-emissions gas turbine retrofit equipment that helps avoid the costly alternative of post-combustion emission control.

The ISTIGs, in particular, are approximately 50 percent more efficient than conventional power plants, cost half as much as new coal or nuclear plants, and can help solve the nation's air pollution problems. Conceptual studies of the IR-CRGT turbine indicate that high efficiencies and very low emissions can be achieved using this technology. In this technology, some of the natural gas fuel is reformed using heat from the turbine exhaust, thus increasing system efficiency to levels as high as 60 percent. The presence of hydrogen in the fuel can decrease NO_x to below 5 ppm. The principal area for research is the development of an efficient reformer that operates at temperatures low enough for effective heat recovery from the turbine exhaust.

The need also exists for RD&D efforts aimed at other engines. Such efforts must adapt the latest liquid-fueled engine technology to dedicated natural gas engines that produce shaft power for water pumping, gas compression, and various industrial and commercial applications. The necessary RD&D includes increasing efficiency and power output through improved combustion techniques and reducing emissions while preserving performance through advanced controls, optimized components, and innovative exhaust treatment techniques.

9. Advanced Glass Melting. Producing glass for containers, windows, and insulating fibers is one of the most energy-intensive industries in the United States, consuming about 300 trillion Btu per year. Natural gas accounts for more than 70 percent of this consumption. Glass manufacturers have been seeking ways to increase the production rates of existing equipment and to reduce overall production costs. They sometimes

achieve this by augmenting heat from fossil fuels with electric "boosting" technology. Another trend is the growing use of cullet (recycled glass) to reduce fuel cost and to increase production. R&D to reduce emissions and increase productivity is needed to maintain the competitive position of natural gas in glass melting processes.

R&D should focus on advanced glass melting technology, which would be much more efficient than conventional furnaces. Raw materials would be injected into a natural gas flame and melted in suspension in less than 50 milliseconds allowing increased production. It is estimated glassmakers could reduce operating costs by \$3 to \$8/ton and reduce the floor space needed to produce glass. A joint DOE/GRI program is needed in FY 1992 and FY 1993. Each participant should commit \$3 million per year.

10. Metals Refining. The primary and fabricated metals industries, including iron, steel, and aluminum, employ some of the most energy-intensive industrial processes in the U.S., consuming nearly 20 percent of the natural gas used for heat and power in the manufacturing sectors. Domestic metal manufacturers have shown a growing resolve to ensure their future viability by investing in advanced production technology and processes. R&D efforts are warranted to develop natural gas technologies that can play a synergistic role in these changes and help ensure that natural gas remains an attractive, cost-competitive energy option in this important manufacturing segment.

Iron Production: Primary iron production uses metallurgical coke (produced from coal distilled in coke ovens) to provide the heat and chemical reactants necessary to reduce iron ore to pig iron in blast furnace operations and produce molten iron in foundries. R&D efforts are warranted to investigate natural gas use in blast furnaces and cupolas--as a reducing agent or as a fuel supplement--to overcome age-induced economic and environmental difficulties associated with these facilities and to give steelmakers the flexibility to meet rapid changes in demand without reactivating marginal facilities or expending scarce capital resources.

Steel Production: Although steel production is still performed primarily in integrated processes using ore-derived iron sources, steel "mini-mills" melting steel scrap in electric arc furnaces (EAFs) represent a growing segment of the industry. Adapting cost-effective natural gas equipment to (1) EAF scrap-based steelmaking and (2) existing basic oxygen furnace installations to permit increased use of scrap charges may offer potential opportunities for steel producers to reduce their production costs and increase operational flexibility.

In conventional steelmaking operations, molten steel is solidified into heavy ingots which are later heated in soaking pits or reheat furnaces before shaping and finishing. Natural gas consumption in soaking pits and reheat furnaces exceeds 100 trillion Btu per year. R&D is needed to ensure that natural gas remains the least-cost fuel option for traditional forging operations, as well as continuous thin-section casting processes which produce products in nearly final shape. An annual DOE R&D program of \$7 million is needed.

Nonferrous Metals Production: Production of primary nonferrous metals (e.g., aluminum and copper) from their respective ores is performed chiefly by electrolysis or roasting techniques. Few opportunities exist for displacing these technologies. Of growing importance, however, is the trend toward increased recycling of scrap products. Efforts directed toward secondary refining and melting equipment, including efficiency and productivity improvements for gas-fired melters, present opportunities for natural gas to continue to provide benefits in nonferrous metals manufacturing processes.

Natural Gas Storage

The continuous on-demand delivery of natural gas by utilities and pipelines to their customers requires a careful balance among supply, storage, and transport systems. In some colder urban environments the peak winter heating demand can exceed the primary pipeline capacity. When this occurs, additional gas must be provided very quickly, usually from nearby underground storage or LNG peak-shaving facilities.

Despite some regional variation, gas industry storage experts estimate that operation and maintenance costs for underground gas storage account for approximately 5 percent of the total cost of service for pipeline and distribution companies. Research is needed to improve the efficiency of gas storage operations to reduce these costs. Areas requiring near-term R&D to reduce underground storage operations costs include: (1) storage well productivity enhancement, (2) storage well repair and maintenance, and (3) injection/withdrawal cycling effects analysis.

Even if operation and maintenance costs are successfully reduced, the ability to use underground storage is still limited by site availability, storage capacity, and deliverability. R&D is needed to explore ways to better utilize existing storage fields and to develop new storage sites, techniques, and technologies. An annual DOE budget of \$3 million is needed. GRI will contribute an equal amount of funding in FY 1993 and FY 1994 for a joint cooperative program.

Underground storage capacity is also limited by the large proportion of base gas (or cushion gas) required for maintaining minimum field pressures. Representing more than 65 percent of the total stored natural gas, this base gas is unusable so long as the storage site is being actively operated. Under current market conditions, the base gas may represent as much as one-third to one-half the investment required to develop a new underground storage field. Research is needed to optimize the use and recovery of base gas and to examine the possibilities for using less costly inert gases to reduce base gas requirements in new storage reservoirs.

Transportation Fuel Alternatives and Emissions Controls

In the U.S., an estimated 30,000 natural gas vehicles (NGVs) are currently in operation—chiefly gas utility vehicles, government vehicles, buses, and other

intracity vehicles--which consume about 5 trillion Btu of natural gas annually (or the equivalent of 40 million gallons of petroleum fuels). This represents a minor fraction of the estimated 16,500 trillion Btu (or 130,000 million gallons of petroleum fuels) consumed annually by over 170 million vehicles in the U.S. Although natural gas has seen limited use in transportation vehicles, several factors have fostered an environment in which fuels such as natural gas can play an enhanced role in meeting transportation sector demands in the coming years.

The strongest incentives for broader adoption of alternative transportation fuels are public health and environmental concerns. Other concerns are over energy security coupled with trade imbalances resulting from oil imports. Another factor important to alternative fuels R&D is the potential for savings.

Infrastructure issues affect consumer considerations for vehicles powered by alternative fuels. Vehicle conversion needs to be accomplished through both retrofit and new vehicle production approaches. Widespread public use of alternative fuels would require either modification of many existing fueling stations or construction of a large number of new stations. Requirements for fuel production facilities is not a large concern for natural gas because of current large-scale production and a strong supply outlook. An extensive transmission system is already in place for natural gas.

Although extensive operating experience has already been gained from the 30,000 NGVs on U.S. roads, R&D efforts are warranted to ensure that (1) natural-gas-powered vehicles cost-effectively meet current and anticipated regulatory requirements and consumer performance expectations and (2) a rational fuel-use transition can be made in those selected transportation applications where natural gas offers benefits to users. In particular, R&D is needed to (1) develop natural gas engines and fuel systems to achieve low emissions while maintaining good performance and driveability and providing durability and reliability; (2) identify alternative materials and manufacturing technologies to achieve lower cost, lighter weight, and greater capacities for on-board storage cylinders; (3) extend the driving range of NGVs by developing advanced storage media such as solid adsorption systems that permit more fuel to be stored in smaller, lighter vessels; (4) improve refueling systems and other ancillary equipment to maximize the economic benefits of using natural gas and to enable gas to compete over the long term with the alternatives; and (5) ensure that technical questions related to a refueling infrastructure are resolved.

The Committee on Government Operations' 37th Report issued in November evaluated the use of NGVs by the U.S. Postal Service. A key finding was, "The Postal Service has tried seven different types of alternate fuels in its fleet since the early 1970s . . . CNG is the only fuel that has proved to be both economical, safe, and viable." Among the report's recommendations were a federal alternative fuel demonstration program, development of an NGV refueling network using centrally fueled government vehicles, and an accelerated R&D program for NGVs. GPO urges this Committee to implement the report recommendations starting in FY 1992.

Funding is urgently needed for an alternative-vehicle-fuels program consisting of \$10 million to develop advanced compressor technology, storage systems, and dedicated engines and \$15 million to demonstrate the operation of natural-gas-fueled trucks and for the comparative testing and demonstration of buses capable of running on natural gas and LP gas. It is recommended that

DOE pick up the cost of the vehicle conversion and the compression stations for government fleets. Testing should be done for 12 months in both northern and southern climates with 10 to 20 vehicles in each station. GRI is developing a retrofit kit to demonstrate use of natural gas in two-stroke diesel engines, which make up about 95 percent of heavy-duty public transit vehicles. GRI urges DOE to join in this demonstration through a \$3 million cooperative R&D venture. Additionally, \$2 million is recommended for R&D on fuel cells in vehicular use.

Funding requirements in FY 1993 and FY 1994 would be reduced to approximately \$10 million to continue the R&D on engine technology, storage technology, and fuel cells for vehicular use. GRI would provide up to \$3 million to \$5 million in FY 1992, FY 1993, and FY 1994 to cofund the engine and storage R&D programs.

Electrochemical Energy Conversion

1. Molten Carbonate Fuel Cells. A fuel cell uses natural gas in an electrochemical process to produce electricity and heat. This is accomplished with very high overall energy efficiency, good reliability, low noise, and virtually no pollutants.

The development of a carbonate fuel cell system has numerous technical issues that must be addressed and resolved prior to commercial introduction. The major issues fall into two categories: system development and integration; and stack technology and scale-up.

System studies and conceptual designs have indicated feasibility of standard engineering subsystems and economic competitiveness with alternate technologies. Natural-gas-fueled power plant designs in the 1 to 20 MW capacity range are estimated to have electric generation efficiencies in the 50 to 55 percent HHV range. Mature market power plant costs of <\$1,000/kW are expected, and market entry targets of \$2000/kW have been set. One critical assumption of these cost estimates is the ability to cost-effectively manufacture the cell stacks. The other critical issue to achieving these projections and targets is the development of a system-level technology. The initial step is the integration of a sub-scale breadboard system which incorporates all the components of a power plant and verifies their integration and operation through testing. The critical technical issue is the ability to design and manufacture a cost-effective, durable, safe, and reliable system which meets the application requirements. Central to this issue are component selections, integration approaches, control strategies and procedures, and cost-effective fabrication and construction.

Central to the system verification question is the availability of the technology base required to manufacture low-cost carbonate fuel cell stacks with long-term performance and reliability. The technology base efforts of the 1980s have enabled the developers to begin scale-up efforts to full-area and full-height cell stacks.

Major R&D efforts requiring \$38.5 million of DOE funding in FY 1992 are needed to fund the existing fuel cell development teams under contract to DOE to develop cell fabrication technology and durability before detailed

molten carbonate fuel cell system development can be undertaken. Major industry cofunding totaling approximately \$100 million over the next four years is being provided by GRI, M-C Powerteam, EPRI, and natural gas utilities. GRI plans \$20 million of cofunding. Funding required from DOE in FY 1993 and FY 1994 to complete the cell stack design and prototype development is \$25 million per year.

2. Solid Oxide Fuel Cells. Solid oxide fuel cell technology is promising due to its potential for high-power-density cell stacks; its solid-state construction, which eliminates the liquid electrolyte; and its potential as a simpler, less-expensive system. Major R&D efforts are needed, however, on cell fabrication technology and durability before detailed solid oxide fuel cell system development can be undertaken. Annual DOE funding of \$8 million is required in FY 1992, FY 1993, and FY 1994.

SECTION 6004

Natural Gas--The Fuel for the 90s

As an abundant domestic resource, natural gas can play a significant role in the nation's energy balance and has the potential to make a meaningful contribution in cleaning up the environment.

Since natural gas currently accounts for nearly one-fourth of the energy used in the United States, it is important that adequate supplies are available at competitive prices to meet today's demand, as well as to provide for the additional demand which could result as the nation addresses the questions of clean air and global warming. Natural gas is our nation's cleanest burning fossil fuel. Its combustion emits virtually no particulates or sulfur oxides, and it produces far lower emissions of ozone precursors, carbon monoxide, and other pollutants. In addition, when used in conjunction with other fuels, natural gas can assist in lowering pollutants normally produced during combustion of those fuels.

To assess whether it is feasible to increase gas use as one key element of national energy policy, we need to consider current natural gas demand and to examine the gas resource base. Estimated consumption of natural gas in 1989 was 19.4 quads. Current production is running slightly above that at 19.6 quads annually.

Technological advancements will continue to add to the capability to recover natural gas. This is where the federal government needs to ensure a stable research and development program and to involve the natural gas industry in order to be prepared to meet the nation's growing need for a stable domestic energy resource.

A 1988 Department of Energy Study, An Assessment of the Natural Gas Resource Base of the United States, states that a technically recoverable resource base of 1.059 trillion cubic feet (Tcf) of natural gas exists in the lower-48 states (see Table 2). This resource base is made up of proved reserves, inferred reserves, and resources. The recovery of gas in the resources category requires discovery and development of new technology, some using improved understanding of reservoir geometry. In the resources category, 800 Tcf exist or are estimated to exist in conventional reservoirs. More than

half of the total resources evaluated in the lower-48 states, 583 Tcf of gas, is judged economically recoverable at less than \$3/Mcf (wellhead prices, 1987\$). An additional 174 Tcf of gas is judged economically recoverable in a price range of \$3 to \$5/Mcf.

Table 2
Comparison of Recent Estimates of
U.S. Natural Gas Resources
(Tcf)

	<u>DOE</u>	<u>PGC</u>	<u>GRI</u>
Lower-48 Proven Reserves	159	154	159
Undiscovered Resources	<u>900</u>	<u>678</u>	<u>978</u>
Total Lower-48	1,059	832	1,127
Alaska	<u>129</u>	<u>152</u>	<u>N/A</u>
Total U.S.	1,182	984	N/A

It is clear there is no gas resource limitation that would preclude an expanded role for gas in the U.S. energy economy. The uncertainties of gas deliverability are not resource limitations. Rather, they are the pace of technological innovation and of new investment that will be necessary to sustain the levels of gas production needed in the future.

The next question, then, is, "Can technology make a difference in the gas resource base?" The gas resource base accessible to U.S. gas users under current industry practices generally reflects the 1970s perceptions of that resource base. Under current practice (base technology), U.S. gas production was sustained primarily by the discovery of new fields and reserve appreciation in known fields using traditional development practices. Less conventional sources (e.g., Devonian shale, tight sands, coalbed methane) played a very minor role in industry activity. These sources were generally considered to require very high prices and/or new technology.

In the 1980s, new initiatives began to expand the perception of the gas resource base available to the U.S. gas user. New technologies and practices (advanced technology) developed in the 1980s or expected in the future indicate that less conventional gas sources can play a substantial role in future gas supply, even without high prices.

Table 3 categorizes the supply sources in the 1991 GRI Baseline Projection by current practice or new initiatives. Current practice supply declines through the Projection period. The increased gas supply in the 1991 Projection arises from the growing role of new initiatives in the U.S. gas supply picture.

Table 3
Gas Supply Trends
(Quads)

	Actual 1989	1995	2000	2010
Current Practice				
o Domestic Production	18.0	15.8	15.7	14.1
o Canadian Imports	1.3	1.8	2.0	1.5
o LNG Imports	0.1	0.5	0.8	0.8
o Supplemental Sources*	<u>0.2</u>	<u>0.3</u>	<u>0.3</u>	<u>0.3</u>
Total	19.6	18.4	18.8	16.7
New Initiatives				
o Lower-48 Advanced Technology	0.0	1.3	2.9	5.4
o Alaskan Pipeline	0.0	0.0	0.0	1.3
o Canadian Frontier	0.0	0.0	0.0	0.3
o Other Imports	0.0	0.0	0.0	0.2
o Synthetics	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Total	0.0	1.3	2.9	7.2
Total Supply	<u>19.6</u>	<u>19.7</u>	<u>21.7</u>	<u>23.9</u>

*Supplements include "other" gas (SNG from petroleum, propane-air, and refinery gas) and coal gas.

The lower part of Table 3 presents the portfolio of new initiatives sources. The incremental lower-48 gas production resulting from advanced technology provides a little more than 13 percent of U.S. gas supply by 2000 and 22.5 percent by 2010. The advanced technology production is from Devonian shale, tight sands, coal seams, and watered-out reservoirs.

The advanced technology production does not include any contribution from improved gas recovery from high-permeability gas reservoirs using more intensive drilling. The recent DOE gas resource study indicated that with advanced technology, the resource exceeds 120 Tcf at \$3/Mcf. GRI has begun its own analysis of this resource potential, and the first basin analysis has been completed. GRI's study concludes that with improved technology almost 7 Tcf of gas can be recovered from the producing sections in the San Juan Basin at an average levelized cost of less than \$2.50/MMBtu (1988\$).

The contribution of advanced technology production will depend on the pace at which the predictability and reliability of new production techniques can be demonstrated and brought into widespread (i.e., "conventional") use. GRI expects that these advanced technologies will begin to become available in the early-1990s. This will be achieved only through an expanded and directed joint DOE/gas industry near-term supply R&D program to make advanced technology available and widely applied on a timely basis.

It is clear that advanced technology is a major factor in developing a stable, economic domestic gas supply and in solving some of our environmental problems. What is needed is an aggressive federal/gas industry joint R&D effort during the next five years.

Fossil Energy, Natural Gas Supply From Unconventional Reservoirs

In April 1990, DOE released its Gas Research Program Implementation Plan. In this plan the Department acknowledged the need for further natural gas research to provide a clean, economical domestically produced energy source to meet the nation's growing energy needs. In the Plan, it was stated that, "Although only 187 Tcf of the over 1000 Tcf of technically recoverable, domestic gas is classified as 'proved reserve,' the resource base is there. The technology must be developed to find and produce it at an acceptable cost. The major thrust of the DOE implementation program in natural gas is to catalyze and accelerate the development of that technology." The Plan identifies needed research within three time frames as follows:

Near Term. (1) Consolidation of data bases; (2) compilation of gas "atlases"; (3) development of technologies to extract greater percentage of gas remaining in mature fields; (4) restoration of production from stripper wells; (5) economic processing of low-quality gas; (6) improved directional drilling technology.

Mid Term. (1) Focus on tight gas resources--sandstones, shales, and coalbed; (2) development of cost-effective methods for increasing size and gas flow capability of the fracture system.

Long Term. Development of technologies for recovering gas from deep sediments and gas hydrates in unexplored or under-explored zones and in new classes of reservoirs.

The Department developed a base case for funding requiring \$21.2 million in Year 2 of the Plan (FY 1992). The funding breakout included \$6.1 million for R&D on conventional gas; \$10.6 million, on unconventional gas; and \$4.5 million, on speculative resources. Funding of \$23.5 million in FY 1993 and \$24.5 million in FY 1994 is required to implement the Plan.

The Administration noted this plan will be implemented in accordance with the NES R&D framework, which emphasizes that use of joint government-industry R&D consortia. GRI urges the Committee to fund the DOE Natural Gas Plan and stipulate that field-based activities totaling approximately \$10 million be 50-50 cost shared with GRI and the gas industry. GRI has a budget in 1991 of \$38.3 million devoted to these same research areas and is committed to cofunding activities in cooperative R&D ventures.

Natural Gas Supply Enhancement

1. Conventional Sources. GRI, DOE, and the Bureau of Economic Geology (BEG) at the University of Texas at Austin are currently conducting a cooperative R&D venture under a DOE pilot cooperative R&D program. The program looks at extended reserve growth in gas reservoirs, called

secondary gas recovery. The purpose of the three-year, \$22.25 million project is to develop and test technologies and methodologies with near-term potential to identify and recover bypassed gas, trapped gas, and gas from deeper horizons, thus maximizing additional gas recovery from known fields.

Under terms of the agreement, GRI provides the dominant share of the research funds and is responsible for managing the project. BEG serves as principal contractor and coordinates the activities of the subcontractors. Morgantown Energy Technology Center (METC) monitors and provides advice on the project for DOE, as well as input from complementary programs under way at METC.

Independent gas producers, oil field service companies, and major gas producers are integrally involved throughout the project. After laboratory work progresses, studies will be conducted cooperatively with producer/operators, who are drilling commercial wells in selected regions. This strategy provides a cost-effective means of collecting data and permits interim tests of research progress. Data from the cooperative wells will be used in selecting sites for research wells (termed Staged Field Experiment, or SFE, wells). These SFE wells will be drilled specifically for R&D purposes--for example, to confirm or challenge interim R&D results and to test state-of-the-art technologies. The results of the secondary gas recovery cooperative R&D venture will be made available to natural gas producers nationwide. DOE funding of \$2 million is required in FY 1992 and FY 1993 to complete the joint program.

2. Unconventional Sources.

Eastern Devonian Shales: In general, two major factors constrain present-day exploitation of this resource: (1) the inability to predict with confidence the gas production rates that will be obtained in wells drilled outside historical production areas, and (2) the inconsistent response of formations to currently employed stimulation practices.

Barriers to economic production of natural gas from Devonian shales include:

- o Inadequate understanding of factors that control the flow of gas from Devonian shale formations to the wellbore;
- o Lack of effective exploration rationales to identify geographic areas and stratigraphic zones with highest production potential;
- o The need for improved diagnostic methods to assess the potential of productive zones;
- o Inadequate understanding of shale gas reservoir dynamics; and
- o Lack of generally effective stimulation techniques.

Economic exploitation of the full resources hinges on development of improved techniques and technologies for overcoming these limiting factors.

Western Tight Sands: Gas-bearing tight sands occur in the form of blanket-type and lenticular formations. In both types, the effects of a variety of interdependent parameters are still unknown, and consequently, the gas recovery rate and active reservoir life for a given field remain uncertain. To permit low-cost exploitation of the full potential of the tight sands resource base, the following specific technological issues need to be addressed:

- o Determine the relationship between geologic and engineering parameters;
- o Further characterize tight sands gas reservoirs and improve resource estimates;
- o Identify the parameters critical to formation evaluation and gas production;
- o Understand more clearly the mechanisms of hydraulic fracture propagation and control;
- o Diagnose fracture shape and downhole conditions using surface parameters;
- o Provide real-time fracture treatment design changes; and
- o Apply advanced technologies to presently noncommercial areas.

Coalbed Methane: The geologic process of coal formation generates methane, which commonly remains stored within the coal. This methane becomes adsorbed on the coal surfaces. The total U.S. coalbed methane resource is estimated to range from 300 to 400 Tcf of gas-in-place. Resource estimates vary due to uncertainties regarding gas content and recoverability from deep western coal deposits that form a major portion of the resource base. In the West, the Piceance, San Juan, and Raton basins, for example, contain an estimated total of up to 186 Tcf of gas-in-place (an incremental 27 Tcf of which is estimated to be recoverable with advanced technology at costs below \$3/MMBtu [1988\$]). More than 400 coalbed methane wells in these two basins were producing coalbed methane gas as of July 1989. In the East, as of July 1989, over 700 wells tapped gas from Black Warrior Basin coal fields in Alabama, which contain an estimated 20 Tcf of gas-in-place (with costs below \$3/MMBtu [1988\$]). As of the end of 1989, methane from Appalachian coal seams had not yet been commercially produced except for "accidental" production when drilling to other targets.

In many cases, current practices are adequate for producing gas from shallow, single-seam coal beds; however, advances are required in well-completion and fracturing procedures, dewatering techniques, and delineation of reservoir mechanics to economically produce gas simultaneously from shallow, multiple seams or from coal seams deeper than 2500 feet. The principal constraint is the limited ability to effectively stimulate the wells to increase reservoir productivity. Better understanding of coalbed formation damage due to completion techniques and the effects of natural fracturing is also critical to economically recover methane from coal seams. Other incompletely resolved R&D issues include

coalbed methane formation evaluation methods, coal fines production, coal seam dewatering, well design and spacing, well interactions, and multi-zone completion techniques. From an environmental and operating cost viewpoint, improved (lower-cost) techniques for the disposal of water produced concurrently with the gas also need to be considered.

Geopressured/Water-Drive Reservoirs: One approach for significantly extending the gas resource base is to target gas not normally recovered through primary production practices. For example, an estimated 44 Tcf of technically recoverable natural gas, 3 Tcf of which is estimated to be recoverable at costs below \$3/MMBtu (1988\$), is trapped in Gulf Coast onshore water-drive reservoirs. The gas became trapped as a result of water encroachment into production wells and the inability to further reduce reservoir pressure due to high water influx into the reservoirs. As water production reaches high levels, the traditional practice is to plug and abandon the affected wells and ultimately the entire gas field. Recent data indicate that the recovery efficiencies for the prolific water-drive gas reservoirs along the Texas-Louisiana Gulf Coast may be as low as 60 percent or less.

Improving the efficiencies of gas recovery from water-drive reservoirs depends on developing and applying advanced approaches based on the coproduction theory for recovering trapped gas. This theory suggests that a major portion of trapped gas can be remobilized and made to flow to the wellbore if a large amount of water or brine is produced concurrently, thereby significantly reducing the reservoir pressure. GRI-funded R&D (since the early 1980s) addressing these water-drive reservoirs has made progress, including field validation of the coproduction theory. However, widespread additional gas recovery from water-drive reservoirs based on the coproduction theory requires further development of analytical tools, especially verified capability to predict reservoir performance, and field research under varied conditions. A DOE budget of \$10 million per year for the next three years is required.

3. Surface Coal Gasification.

Supplemental gas supplies are projected to play an increasingly important role in meeting demand by the early twenty-first century as the marginal cost of natural gas and competing energy forms increases. Synthetic natural gas (SNG) from coal can substantially extend gaseous fuel supplies; however, converting coal into gaseous fuels that are cost competitive with gas and other energy sources is not easy to achieve. Coal gasification represents a hedge technology that could contribute to the U.S. energy picture in the long term. Since the early 1900s, numerous organizations around the world have devoted substantial effort to coal gasification systems and have developed several processes. The prices of SNG produced from these processes cannot compete in today's depressed market. Fundamental research on advanced gasification processes is necessary to overcome present technical limitations, focusing on lower-temperature processes that could reduce gas production costs. Over the very long term, the magnitude of the nation's coal resource establishes the desirability of finding economical, environmentally acceptable technologies for coal gasification. An annual DOE budget of \$8.5 million is required to continue fundamental research.

4. Biofuels.

In the early 1980s, GRI addressed the issue of producing methane from biomass and waste materials. Interest in such technology continues because net CO₂ outputs are small relative to fossil fuels, but it is generally thought that this synthetic natural gas option is not likely to be significant until well after the year 2000. Recent research has shifted toward understanding the ways microbes affect natural gas operations or could be used to bioremediate gas-industry-related wastes. Research is needed to (1) achieve a low net-CO₂ output relative to fossil fuels, (2) deliver high-purity methane from the bioreactor, and (3) improve selection for plant genetics which favor methane synthesis. A fundamental research program in DOE of \$8 million per year is required.

SUMMARY

An expanded cooperative R&D program requiring the partnership of DOE and the gas industry is required if natural gas is to fulfill its potential to help solve the nation's environmental problems and reduce insecure oil imports. The current DOE FY 1992 budget request does not provide adequate funding for such a joint program. As indicated in the attached exhibits, the DOE R&D budget request is extremely biased toward electricity and recommends spending only 3 percent of the FY 1992 R&D budget for gas-related research.

GRI urges the Committee to address this funding imbalance by authorizing an adequate funding level of \$100 million for gas end-use technologies and \$50 million for natural gas supply R&D. This funding is required to implement a sound, balanced national energy research program.

Exhibit 1
Electric vs. Gas R&D Funding
FY 1992 DOE Budget Request
(\$ Millions)

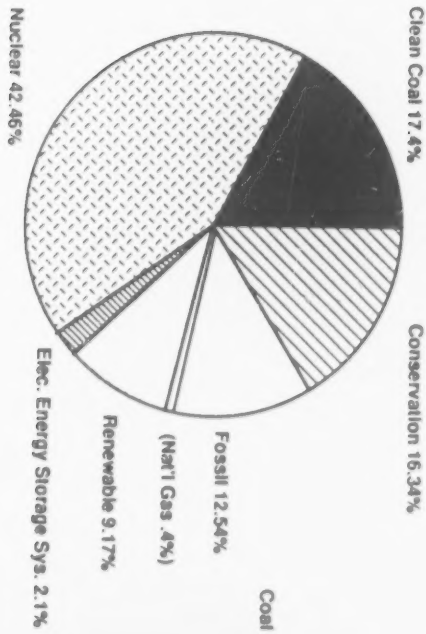
<u>Electric</u>		<u>Gas</u>	
Nuclear Energy	\$ 431.8	ARTD	\$ 1.0
Fusion Energy	337.1	Combustion Systems	.5
Nuclear Physics	342.4	Fuel Cells	22.4
Electric Energy Systems		Surface Coal	
and Storage	38.0	Gasification	5.4
Geothermal	20.2	Unconventional Gas Recovery	8.0
Hydroelectric Systems	1.0	Advanced Extraction and	
Solar Thermal	20.0	Process Technology	3.0
Photovoltaics	50.8	Building Sector	7.5
Wind Energy	13.9	Industrial Sector	9.2
Clean Coal Technologies	315.0	Transportation Sector	12.5
Combustion Systems	18.7	Biofuels	6.3
ARTD	21.4	Geopressured Research	2.5
Control Technology and			<u>\$78.3</u>
Coal Preparation	22.5		
Cogeneration	3.3		
Electric Drives	.5		
Electric and Hybrid			
Propulsion Development	41.6		
Utility Sector	6.8		
	<u>\$1,692.5</u>		

Electric to Gas Ratio 21.6:1

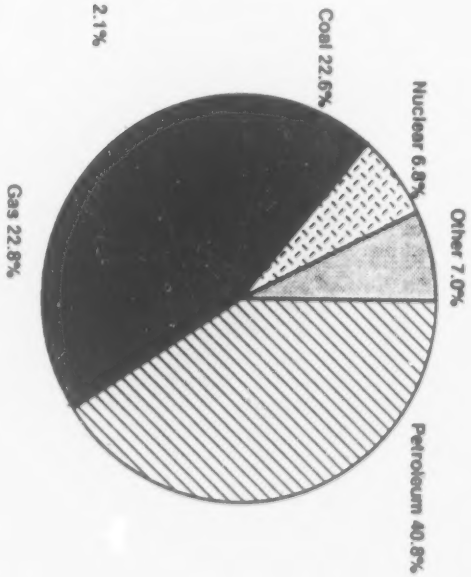
Exhibit 2

DOE R&D Program is Out of Balance with Current Energy Needs

1992 DOE Energy R&D Request



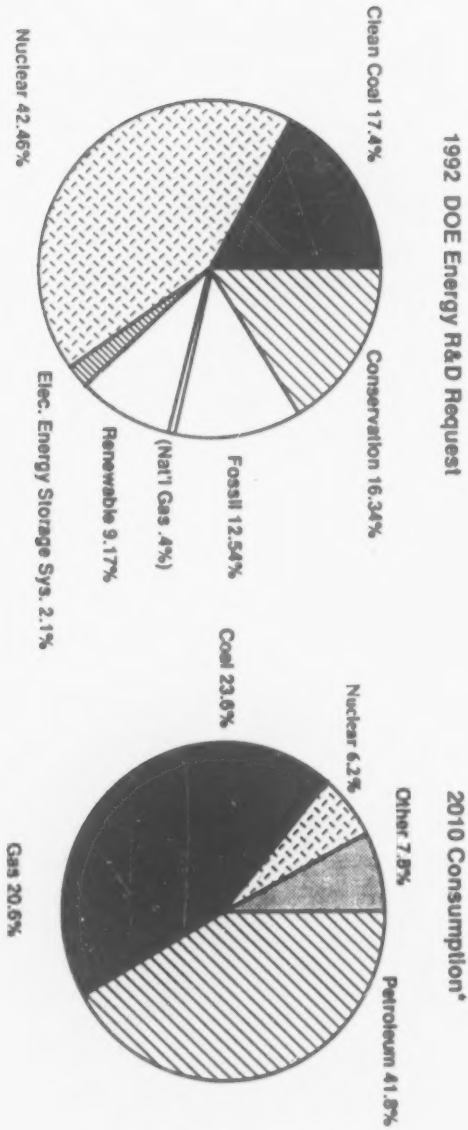
1989 Consumption*



*1991 GRI Baseline Projection of U.S. Energy Supply & Demand to 2010

Exhibit 3

DOE R&D Program is Out of Balance with Future Energy Needs



*1991 GRI Baseline Projection of U.S. Energy Supply & Demand to 2010



American Gas
Association

1515 Wilson Boulevard, Arlington, Va. 22209
Telephone (703) 841-8612

Michael Baly III
President

March 6, 1991

The Honorable Bennett Johnston
Chairman
Senate Energy & Natural Resources Committee
364 Dirksen SOB
Washington, DC 20510

Dear Mr. Chairman:

The American Gas Association (A.G.A.) is currently involved in the process of developing a position on S. 341, the National Energy Security Act of 1991. It is unfortunate that our decision making process does not coincide with your March 7 hearing date.

The A.G.A. Board of Directors will meet on March 14 and shortly thereafter we will be filing written comments with the committee.

We appreciate your recognition of the need to streamline the pipeline construction process. We hope you can appreciate the process we now have underway with our 250 distribution and transmission member companies to provide you and the Committee with our analysis and a meaningful position that addresses the specifics of your legislation in a tangible constructive way.

I appreciate the opportunity to bring this matter to your attention.

Sincerely,

A handwritten signature in cursive script that reads "Mike Baly".

Michael Baly III

cc: Members of the Senate Energy & Natural Resources Committee

**STATEMENT OF
THE AMERICAN GAS ASSOCIATION
BEFORE THE COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
ON TITLE VI OF S. 341
THE NATIONAL ENERGY SECURITY ACT OF 1991**

March 7, 1991

Introduction

Mr. Chairman and Members of the Committee: The American Gas Association (A.G.A.) is a national trade association comprising some 250 natural gas distribution and transmission companies serving over 174 million natural gas consumers throughout the United States. We appreciate this opportunity to present our views on S. 341 as it relates to natural gas-related research, development and demonstration (RD&D) conducted or sponsored by the Department of Energy (DOE).

The American people recognize that greater energy security, improved air quality and energy efficiency are essential to a strong U.S. economy and helping us retain a competitive edge. Enactment of the Clean Air Act Amendments (CAA) and the various national energy strategy (NES) initiatives are a first step in reaching these goals. Sections 6003, 6004 and 6005 of S. 341 should serve as a model for the RD&D programs that will yield the most benefits in the least amount of time. To define these programs further and provide for sufficient funding allocations, the gas industry is proposing a 10 year RD&D program that truly supports the efforts and ideals laid out in the CAA and the NES. To inaugurate this program, the natural gas industry is recommending an authorization and appropriation of \$214.9 million for all DOE gas-related RD&D in Fiscal Year (FY) 1992. This total is broken down as follows: \$165 million for gas utilization R&D in both DOE's

fossil energy and conservation programs, and \$49.9 million for gas supply research in the fossil program. The primary thrust of this major expansion of natural gas related federally-funded research is to develop the technology that will allow natural gas to make a major contribution to the nation's environmental and energy security needs. Natural gas cannot fulfill its full potential without the proposed RD&D.

The Importance of Gas-Related Research

As an abundant domestic resource, natural gas can play a significant role in the nation's energy balance and has the potential to make a meaningful contribution in cleaning up the environment. Natural gas is our nation's cleanest burning fossil fuel -- its combustion emits virtually no particulates or sulfur oxides, and it produces far lower emissions of ozone precursors, carbon monoxide, and other pollutants per unit of energy than coal or oil. In addition, A.G.A. and the DOE National Energy Strategy estimate that natural gas could displace up to 1.7 million barrels of imported oil per day within ten years. An A.G.A. analysis is attached. Intensified RD&D programs focused on gas utilization technologies appropriately backed by continuing gas supply RD&D must be undertaken in order to expedite and expand this schedule and derive the accompanying environmental benefits.

The gas industry recommends that Congress and DOE undertake a long-term (10-year) natural gas RD&D program funded at \$2.5 billion to augment the planned industry funding. Programs should include: stationary emissions and efficiency solutions; transportation fuel alternatives and emissions solutions; electrochemical energy conversion; and gas supply enhancement. A comprehensive 10 year program is

necessary to provide a level of consistency in research efforts that can support projects through to their completion and commercialization.

To initiate these programs we recommend that this Committee authorize \$214.9 million in FY 92 for natural gas RD&D. These funds should be allocated as follows: (1) \$165 million for natural gas utilization programs to accelerate the availability of new technologies and reap the associated environmental, energy security and conservation benefits; and, (2) \$49.9 million to support a continuing natural gas supply RD&D program. This will supplement gas industry, gas equipment manufacturer and producer efforts with estimated funds in the range of \$200 million and \$215 million in FY 92, for utilization and supply, respectively.

This natural gas industry initiative requires funding only for those technologies that are essential and prudent for the orderly development of advanced and new gas utilization and supply methods and processes that will enhance greater energy security, improved air quality and energy efficiency. Recent events in the Middle East underscore the need for better utilization of our nation's indigenous resources. This recommendation for a total amount of \$214.9 million is required because of the increasing urgency to promote low pollution end-use technologies and fuel efficiency. This in turn will help meet more ambitious national objectives that will take us into the 21st Century.

S. 341

We are pleased that Sen. Johnston and the cosponsors of the National Energy Security Act of 1991 are proposing to authorize funds for natural gas research and development that are intended to increase America's energy security in ways that are

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environmentally desirable and economically affordable. Except for heat engines, the bill does not authorize specific amounts of funding and does not, in most instances, prescribe how this money should be spent. Sec. 6003(a)(4) does, however, include the commercialization of molten carbonate fuel cells. We urge you to also specifically support the commercialization of phosphoric acid fuel cells. The gas and electric industries, along with DOE, have invested over \$200 million in R&D for these fuel cells. To ensure this sizable investment brings the appropriate economic returns and environmental benefits, a vigorous technology transfer program must follow.

Regarding particular programs, we urge this Committee to include in S. 341 the gas industry's RD&D initiative, described above and further outlined below, to carry out the goals of the bill. Unless specific programs are more clearly defined, we are unlikely to achieve the desired energy security, energy efficiency and environmental results.

We also believe it is imperative that members of the Committee work closely with the Appropriations Committee to assure that these programs are brought to fruition. There is a striking imbalance between the amount of natural gas used in the United States and the amount of RD&D funding natural gas receives. Natural gas supplies about 23 percent of America's energy needs, yet the federal government spent just over \$117 million for FY91 on gas-related R&D, out of a total DOE R&D budget of approximately \$1.8 billion. In contrast, nuclear power provides about 7 percent of the nation's energy and received over \$503.2 million, while coal supplies 25 percent of the energy and received about \$680 million in FY91. Please understand we are not attempting to identify or recommend the source of funds needed to meet the increased federal funding for natural gas RD&D.

The natural gas industry advocates that the private and public sectors share responsibility for funding RD&D. Where feasible, market incentives drive RD&D funding by an industry. However, in the case of secure energy, a clean environment and energy life-cycle efficiency markets do not adequately recognize those benefits that accrue to the nation as a whole. This results in lack of industry funding at the conceptual and proof of concept stages for viable technologies. This early life-cycle stage is where government must recognize its long term responsibilities by heavier than normal participation in the RD&D process. It has to be understood by government that by achieving a balance in energy technology choices the nation as whole benefits, not just the direct users of the technology.

Traditionally, the R&D phases are the lowest cost component of the total path from basic research to successful commercialization. When a product progresses to the stage where the technology is ready to be transferred from the laboratory into the commercial market -- that is the logical point that industry takes on a higher percentage of funding. Therefore, legislation must not predetermine the federal share of the cost of a project at any particular stage in its development.

Specific Funding Recommendations*

GAS UTILIZATION R&D: \$165.0 MILLION

(1) Fuel Cells (\$62.0 million)

Natural gas-powered fuel cells convert the energy content of gas directly into

*Funding amounts listed are for FY 1992.

electricity and by-product heat using a highly efficient electrochemical process. The electrical conversion efficiency of gas-powered fuel cells is approximately 15-20 percent greater than the conversion efficiency of traditional electrical generation. Fuel cells are also environmentally benign, generating very little noise and vibration, and emitting virtually no pollutants.

A total of \$38.5 million should be used to support accelerated RD&D for molten carbonate fuel cells and \$10.5 million should be used for accelerated and focused development of solid oxide fuel cells technologies. Furthermore, \$2.0 million should be allocated for intensified development of solid polymer (proton exchange membrane) fuel cell technology. This is a promising new approach to the development of fast-response, compact fuel cells with low temperature heat rejection, suitable for electric power generation in stationary as well as mobile use. An additional \$2.0 million should also be allocated to applied fuel cell research covering projects aimed at using solid polymer cell concepts in small-scale electric power generation, and projects that seek to improve the reliability and life of critical fuel cell components. We also recommend a vigorous technology transfer program for phosphoric acid fuel cells funded at \$9 million.

(2) Heat Engines (\$6.9 million)

A.G.A. recommends an RD&D program in DOE's Heat Engine Program for the development of high efficiency natural gas-powered turbines for electric generation. Such a program should include advanced combined cycle turbines, steam-injected gas turbines (STIG) and intercooled steam-injected gas turbines (ISTIG). The ISTIGs, in particular, are approximately fifty percent more efficient than conventional powerplants, cost half as

much as new coal or nuclear plants and can make great contributions to the nation's air pollution problems.

(3) Coal and Waste Cofiring/Reburn (\$8.5 million)

Cofiring of coal with natural gas provides a fraction of its total heat input and results in significant SO_2 and NO_x reductions. Reburn technology is aimed primarily at reducing powerplant NO_x emissions. Unlike cofiring, reburn technology injects natural gas into a zone beyond the primary combustion zone to create a gas rich reburn zone. Combining reburn with sorbent injection results in both NO_x and SO_2 reductions.

Cofiring technology applications to industrial processes and waste-to-energy plants have not yet been addressed. Developments in these areas are at the early stages, but will require significant funding to support technology advancements. We therefore recommend \$8.5 million for coal and waste cofiring and reburn applications.

(4) Combustion System/Emission Control (\$17.8 million)

Because of the importance of this program to the nation as part of its energy strategy and in response to recently-adopted Clean Air Act legislation, \$17.8 million is needed to accelerate and focus combustion and burner RD&D efforts aimed at developing low emissions gas equipment for residential, commercial, industrial, and utility applications. This includes high-efficiency, low-emissions burners, burner systems, and new methods of post-combustion control for new as well as retrofit installations.

Our recommendation includes: \$6.0 million for the development of new methods of post-combustion emissions control that will promote the search for practical, low-cost solutions to typical retrofit/add-on needs of electric generation and industrial process

facilities; \$5.3 million for co-funding accelerated research specifically focused on utility electric generation (UEG) and enhanced oil recovery (EOR) operations using natural gas combustion equipment; and \$6.5 million for the residential/commercial end-use sector.

(5) Natural Gas-Powered Heat Pumps and Desiccant Cooling (\$18.0 million)

The gas heat pump provides heating and cooling in a single unit, using less energy than a conventional or high efficiency furnace uses for heating alone. Current performance estimates suggest that in heating, the gas heat pump could save one-half of the gas used in a conventional furnace and one-quarter of the gas used in a high efficiency furnace.

Development of this equipment could greatly reduce the need for peak electric generating plants. More research is necessary to develop highly-efficient, reliable and cost-effective gas heat pumps for residential and commercial applications.

(6) Industrial Processes (\$18.8 million)

We recommend \$7.8 million to demonstrate newly developed processes in real-world industrial environments, not laboratories. Several innovative concepts, which promise to revolutionize the manner in which process heat is generated in the industrial sector, are under development and will be available for technology transfer within the next two years. Applied RD&D efforts, funded at \$4.0 million by DOE are also proposed to improve efficiency, productivity and product quality in industrial gas-fired equipment and processes through the application of advanced combustion, heat transfer and controls technology. The gas industry is also recommending that \$6.0 million be allocated for research and development focused on low emissions of natural gas combustion

equipment for this sector. These funds will cover activities to help extend application of technologies employed in UEG/EOR end-use sectors to industrial processes and to obtain fundamental understanding on the formation and recombination of pollutants. Continuing ceramic material RD&D funded at \$1 million is also needed to address several technical issues that have impeded wide market penetration.

(7) Natural Gas Vehicles (NGVs) (\$27.0 million)

Use of alternative-fuel vehicles, including NGVs, is being required by the Clean Air Act and various National Energy Strategy initiatives. Accelerated research on novel gas compression concepts, funded at \$10 million, is required to advance the development of compressor technology that will facilitate the growth of the necessary natural gas refueling network. Research must also be conducted on advanced storage systems, such as sorbent materials, to increase the understanding of gas storage technology, particularly the fundamental principles of natural gas adsorption, absorption, clathration and catalysis.

In addition, \$15 million in DOE funding is also needed to conduct accelerated technology transfer on a variety of NGVs in many medium and heavy duty applications. To be most effective, such technology transfer activity requires that the government purchase and operate NGVs for its fleet. We are also proposing \$2 million be allocated for advanced propulsion concepts such as a low-cost version of aerospace-derivative fuel-cells that can be adopted to vehicular use.

GAS SUPPLY RD&D: \$49.9 MILLION

DOE's continuing involvement in gas supply research is essential to ensure the recovery of a larger percentage of the total domestic gas resource base. Our

recommendation of \$49.9 million for FY 92 shows no increase above the industry's recommended FY 91 funding levels and is predicated on the continuation of the gas supply research programs recommended for FY 91.

The amount of gas that can be recovered from the total gas resource base is directly contingent upon the ability to develop new tools and techniques to recover this gas at commercially viable prices. This resource base is made up of reserves and resources. The recovery of gas in the "resources" category requires discovery and development of **new** technology on the basis of an improved understanding of reservoir geology. Of the total resource evaluated in the lower-48 states 564 Tcf is judged economically recoverable at 1987 wellhead prices of less than \$3/Mcf. An additional 131 Tcf of gas is judged economically recoverable in a price range of \$3 to \$5/Mcf.

(1) Unconventional Natural Gas (\$23.8 million)

Devonian shales and tight sands are estimated to contain up to 1,800 Tcf and 900 Tcf of natural gas, respectively. Tight formation gas is produced using advanced recovery techniques, such as hydraulic fracturing. A.G.A. estimates that favorable economic conditions and substantial investment in advanced recovery techniques could increase the accessible gas resources and improve the economics of production.

In order to maximize the amount of natural gas recovered from our abundant resource base, basic geoscience research must be expanded. This research should be aimed at increasing our knowledge of the geological/geochemical/geophysical characteristics and parameters of both conventional and unconventional formations. Moreover, because of the potentially enormous size of what we call advanced

unconventional natural gas resources, extensive research is necessary to verify how much may be technologically and economically recoverable.

To enhance the development of technology necessary to recover the gas from unconventional gas formations, more research must also be conducted to develop and refine advanced stimulation and drilling techniques. Field testing and a technological database must also be established. We are recommending funding of \$23.8 million in the unconventional gas recovery program to continue DOE's secondary gas recovery program and ongoing research activities in western tight sands, Devonian shales, and other complex formations and to support expanded geoscience-type research.

(2) Surface Coal Gasification (\$8.5 million)

For surface coal gasification to make a significant contribution to gas supplies, gasification techniques must be developed to accommodate high-sulfur Eastern coals and combustion-inhibiting coal "fines." Research must be conducted to develop techniques for gasifying these "fines," for disposition of liquid byproducts, and for consolidated "fines" and tars for utilization. Scientific and engineering feasibility studies of advanced generation gasification processes must also be conducted to develop a technological database for such processes.

(3) Geopressured Methane (\$9.6 million)

Geopressured methane is found in either a free state or dissolved in water and trapped in sedimentary rock at higher-than-normal pressures. One of the largest geopressured areas underlies a portion of the Texas and Louisiana Gulf Coast. Estimates of the total resource in-place range up to 6,000 Tcf; however, estimates of the amounts

of gas that might ultimately be recovered, given current recovery techniques, range between 10 and 150 Tcf. If technological breakthroughs can be achieved, geopressured methane could become another major source of domestic energy.

Research conducted by DOE in geopressured/geothermal zones is focused on producing both gas and electricity from low-grade heat in the reservoir brine. DOE should redirect its research efforts and concentrate on recovering the vast amount of dissolved methane found in geopressured zones. In addition to DOE's current geopressured program, DOE should develop new approaches that utilize traditional engineering principles to maximize gas production and minimize brine production.

(4) Biofuels (\$8.0 million)

Since the supply of organic and waste materials is virtually unlimited, supplemental methane supplies from biomass and waste conversion can add significantly to the total future gas supply picture. In addition, controlled production and use of methane from these sources can reduce the natural release of methane from the decay of these waste materials. This decay is a substantial contributor to the overall rate of methane emissions to the atmosphere that contribute to the greenhouse effect. Finding sites for disposal of municipal solid waste is an increasing problem in communities across the nation. Therefore, developing energy from municipal solid waste and other biomass would promote the environmental benefit of productive use of currently "useless" materials. However, the quality of the gas produced and a suitable processing technique are important concerns that inhibit the widespread use of these potential gas resources.

The gas industry fully supports the gas-related biofuels R&D being carried out at

the Solar Energy Research Institute (SERI) and recommends strong federal support for continuation of these important activities. Advances have been made in both the thermochemical and biochemical conversion processes, but more extensive studies and technology advancements are necessary to fulfill biomass' contribution as a usable source of energy.

Conclusion

The natural gas industry recognizes the continuing budget deficit places severe constraints on federal energy research dollars. However, increasing natural gas RD&D will more equitably match the contribution natural gas supplies to the nation's energy mix and will yield both short- and long-term environmental and energy security benefits for the nation.

DOE FY 1991 & 1992 Gas-Related Budget
Major Gas-Related Supply and Utilization Research Programs
(\$ Millions)
(As of 2/12/91)

	FY 1990 Congress. Approp.	FY 1991 DOE Request	FY 1991 Gas Industry Recomm.	FY 1991 Congress. Approp.	FY 1992 DOE Request	FY 1992 Gas Industry Recomm.
Gas Supply						
Unconventional Natural Gas	14.6	13.7	23.3	15.97	8.0	23.8
Surface Coal Gasification	23.7	8.5	8.5	15.12	5.4	8.5
Underground Coal Gasification	0.8	0.5	0.5	.794	0.0	0.0
AEPT*	4.0	4.5	-	4.67	3.0	-
Biofuels	8.6	2.5	8.0	4.6	6.3	8.0
Geopressured Resources	<u>6.0</u>	<u>2.9</u>	<u>9.6</u>	<u>6.0</u>	<u>2.5</u>	<u>9.6</u>
Subtotal	57.7	32.6	49.9	47.15	25.2	49.9
Gas Utilization						
Fuel Cells (Gas Related)	30.1	7.1	40.5	36.02	22.4	62.0
Heat Engines	0.0	0.0	2.9	0.0	0.0	6.9
Combustion-Cofiring/Reburn	2.5	0.0	8.5	0.0	0.0	8.5
Combustion-System/Emiss. Cont.	0.0	0.0	0.5	0.0	0.5	17.8
Conservation (Heat Pumps, Cooling, Industrial Processes)	25.4	17.8	16.8	25.1	16.7	36.8
Natural Gas/Diesel Vehicles	2.5	4.0	10.6	5.5	12.5	27.0
ARTD (Gas Related)	4.7	3.9	6.0	3.9	1.0	6.0
Subtotal	<u>65.2</u>	<u>32.8</u>	<u>85.8</u>	<u>70.52</u>	<u>53.2</u>	<u>165.00</u>
TOTAL	\$122.9	\$65.4	\$135.7	\$117.67	\$78.3	\$214.90

*Advanced Extraction and Process Technology - Geoscience research has traditionally been folded into this line item.

Planning & Analysis Issues

Issue Brief 1991-3

January 16, 1991

The Role of Natural Gas in Offsetting Oil: 1991 Update

A. Introduction

The invasion of Kuwait in August has brought the subject of U.S. dependence on oil imports to the forefront again. America now imports about half of the oil that it consumes. Most oil is used in the transportation sector, however, a large volume of fuel oil is also used in stationary applications: for space heating; for industrial process and boiler use; and for electricity generation. Oil use in stationary applications (excluding feedstocks) in 1989 amounted to 4.9 million barrels per day (b/d), or the equivalent of 68% of annual crude oil imports. Distillate and residual fuel oil, the oil products most likely to be offset by gas, make up half of that total. In contrast, natural gas is essentially a domestic resource with over 40 years of conventional supply under current consumption rates and the potential to extend the resource base well beyond the next century.

The purpose of this analysis is to demonstrate the extent to which natural gas can directly contribute to national energy security by substituting for oil in existing applications. This study updates a similar analysis published by A.G.A. in 1988. This analysis was prepared on a market-by-market basis over different time horizons: 30-day (immediate); 1 year; 5 years; and a 10-year potential. This analysis estimates oil displacement potential - it is not a forecast. Such levels would only be achievable if government policy actively promotes natural gas.

B. Executive Summary

In an emergency or oil supply disruption scenario natural gas could immediately offset 130 thousand barrels per day (mbd) of distillate and residual fuel oil in stationary applications. Within a year the rate of displacement could increase to 420 mbd as significant penetration in the dual-fuel capable boiler markets accumulates. After five years, the combination of growing conversions in the residential and commercial buildings sector (mainly on the East Coast) and further penetration in boiler and process markets would raise the penetration rate to 1.0 million b/d. If a comprehensive government initiative was begun now with a 10-year horizon, it is estimated that 1.5 million b/d of fuel oil use could be offset by the end of the decade. Adding 240 mbd that would, in effect, be offsets of gasoline use in fleet vehicles in the transportation sector, would bring total oil displacement by natural gas to 1.7 million b/d after 10 years.

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An important component of this initiative would be increased natural gas pipeline capacity into oil-dependent regions. The volume of current planned natural gas pipeline capacity would go substantially toward accommodating the projected level of oil displacements over five years. To achieve the ten year goal, a similar increment in pipeline capacity and an increase in gas storage capacity would be needed. The exact size of the increment is dependent upon seasonal load factors and upon the volume of additional gas load that would derive from economic growth and other new sources.

The highlights for each stationary market and for the transportation sector for each succeeding timeframe are as follows and summarized in Table 1:

- The residential market for fuel oil is essentially distillate oil use concentrated on the U.S. East Coast, particularly in the Middle Atlantic census division which accounts for 5.6 million of the 11 million oil-heated households. Conversions from oil to natural gas heat already comprise the single largest source of residential conversions annually. Based on previous conversion growth rates it is possible to envision 350,000 conversions in the first year, displacing 20 mbd, rising to 500,000 conversions annually by the fifth year, resulting in oil offsets of 100 mbd after five years. If the annual rate of conversions then holds at 500,000, the cumulative potential impact after 10 years would be the displacement of 225 mbd of distillate fuel oil use -- roughly half of the current consumption level. This ten year goal would require additional pipeline and storage capacity and distribution mains given the seasonality and location of this load.

- In the commercial market, both distillate and residual fuel oil are used - primarily for spaceheating, but also for water heating in large multi-family buildings. Similar to the residential sector, commercial fuel oil consumption is also concentrated on the East Coast, but to a lesser extent. In the event of an oil supply disruption, displacement of oil use in dual-fuel boilers could reach 25 mbd. After a year, the displacement of all oil in gas-served buildings, as well as in a portion of the more than three million multi-family units with gas service nearby, would increase the offsets to 100 mbd. With increased penetration in the multi-family sector, the offsets could reach 190 mbd after five years and as much as 250 mbd after 10 years, or nearly 65 percent of the current level of commercial fuel oil use.

- The industrial market is the largest stationary market for fuel oil. Even after discounting those oil applications for which natural gas is not suited for displacement (such as feedstocks, asphalt and vessel bunkering) there remains nearly 900 mbd of distillate and residual fuel oil use in boiler and process applications that theoretically could be displaced by natural gas. Oil offsets could rise from 50 mbd in the immediate term to 200 mbd after a year. This would occur predominantly in dual-fuel boiler applications where gas and residual oil, in particular, are intensely competitive. After five years, when gas penetrates more into the applications using distillate oil, the offsets are projected to increase to 400 mbd. If there is, in fact, a policy designed to minimize the use of oil in industrial applications, the extension of gas service to a high proportion of what had formerly been unserved customers could potentially see the level of offsets reach 600 mbd after 10 years. While certainly a large volume, this would only be about 15 percent of all the oil consumption (including LPG) in the entire industrial market and two-thirds of the residual/distillate oil use. Like the residential and commercial sectors, displacement of oil in the industrial market to meet the ten year goal will require significant new construction of pipeline and distribution infrastructure. Seasonal service arrangements would also have to be enhanced.

• Fuel oil consumption (almost entirely residual oil) in the electric utility market is heavily concentrated on the East Coast. Over 80 percent of this oil consumption occurs in the three census divisions along the Atlantic. Unlike the industrial market, which is made up of thousands of customers and more widely distributed, the number of power plants involved is relatively small. About 125 of the 290 or so power plants that use fuel oil are on the East Coast -- and some of these plants are already dual-fuel capable. Consequently, the potential for oil offsets rises quickly from 50 mbd in the very short-term to 300 mbd after five years. With a concentrated national effort, three-quarters of fuel oil consumption could be offset in 10 years, reaching 400 mbd. Given the location of these plants, it is likely many plants would choose to be dual-fuel capable, interruptible gas customers. Thus complete displacement of oil year-round would be unlikely.

• In the transportation sector the displacements would be limited in the early years, reflecting the fact that a natural gas vehicle (NGV) manufacturing and fuel distribution infrastructure is now beginning to develop. The oil displacement rate would move up from minimal levels in the first five years, rising quickly by the end of the decade to 240 mbd as 2 million centrally-refueled fleet vehicles in major urban areas convert to natural gas. The passage of the Clean Air Act of 1990 alone will spur oil offsets in the transportation sector.

Table 1				
Potential Oil Substitution (thousand barrels/day)				
Stationary Sources	Immediate	One-Year	Five-Years	Ten-Years
Residential	5	20	100	225
Commercial	25	100	190	250
Industrial	50	200	400	600
Electric Generation	50	100	300	400
Subtotal	130	420	990	1475
Mobile Sources				
Vehicles	-	-	5	240
Total	130	420	995	1715

Note: NGV market penetration grows dramatically after five years as a result of the new Clean Air Act legislation which begins to take effect in 1995. A.G.A. forecasts that by the year 2005 natural gas vehicles could displace as much as 675 mbd.



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Prepared Statement Of

ASSOCIATED GAS DISTRIBUTORS

Submitted to the

UNITED STATES SENATE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

on S. 341 --

NATIONAL ENERGY SECURITY ACT OF 1991

March 14, 1991

The Associated Gas Distributors (AGD) is a group of 41 natural gas distribution companies which provide gas utility service to consumers in Southern California and along the East Coast. As State or locally regulated public utilities, the AGD members approach federal energy policy issues affecting natural gas with a unique perspective. These companies are not free to "pick up their pipes" and move to some more profitable location. They are, instead, inextricably bound to the local areas and economies wherein they serve.

Unlike gas producers, marketers, brokers and large industrial users, the AGD members are regulated public utilities. They have obligations at the State and local level which transcend, both as a legal and practical matter, the obligations of any other segment of the gas industry. Unlike interstate pipeline companies, which are for the most part regulated by the Federal Energy Regulatory Commission (FERC or Commission), the AGD members are not directly regulated by FERC, but are directly and significantly affected by the policies and rules established there.

AGD agrees that there is a great deal that can be done to streamline the federal natural gas regulatory structure. Indeed, some revisions to that structure are essential to permit the industry to meet the demands of the marketplace for natural gas. Air quality concerns, undue reliance on imported oil, balance of payments and efficient use of energy all point to a more expanded

role for the direct use of natural gas in the Nation's energy consumption mix. Gas utilities and the infrastructure they command stand ready, willing and able as the critical link to the retail marketplace to rise to that occasion.

Legislative initiatives, such as S. 341, hold the promise of removing some of the unnecessary and burdensome institutional barriers to natural gas reaching its full potential. By and large, these initiatives are welcome and long overdue. The key to public policy success on these initiatives is to maintain a sense of equilibrium or balance.

Fundamental systemic changes are necessary. And, it is equally necessary that the embedded benefits of the gas utility infrastructure be retained and nurtured to an even greater potential betterment of society. Thus it is that AGD urges the Committee throughout this prepared statement to weigh carefully the implications of its actions on the gas utility segment of the industry and the millions of consumers served thereby. It would be ironic indeed if the well-intended initiatives of today are permitted to so obscure and undermine the benefits of the present system that those benefits are lost for naught.

COMMENTS ON
TITLE X OF S. 341

Section 10001 -- Optional Construction Procedures. AGD generally supports the optional procedure for construction of natural gas transportation facilities as drafted in § 10001. Several key features of § 10001 are essential and should be retained and, in some respects, clarified. First, the power of the Federal Energy Regulatory Commission to attach reasonable terms and conditions to the operating certificate, as set forth in paragraph (b)(2) will presumably provide an opportunity for affected parties to obtain Commission redress on matters which adversely impact their interests. It should be made clear that the Commission's conditioning power will be available at least to address issues related to impairment or degradation of service to existing pipeline customers, oversubscription of capacity, subsidization of the new service by third-parties and bypass of local distribution companies (LDC).

Second, the 10-year prohibition on allocating costs of the facilities to other services of the company, § 10001(d), properly seeks to shield third-parties from costs for which they are not responsible. This is in accordance with traditional cost responsibility concepts and should be retained. It may be advisable also to consider a more flexible cost allocation procedure whereby costs could, upon a proper showing, be allocated differently

to account for changes in the usefulness of the service over time, though still within the 10-year period.

Third, subparagraph 10001(c)(1)(iv) provides that rates for the facility shall be "stand-alone and incremental." This seems to imply that rates would be "cost-based" as well, even though subparagraph 10001(c)(1)(iii) provides that an agreement between the company and a person who contracts for transportation service "may constitute a rate schedule." There appears to be an ambiguity here which should be clarified to assure that rates are "cost-based," that is, based upon booked cost of service data. This is an especially important notion given that in most circumstances pipeline/facilities capacity is now, and is likely to remain in the future, a monopoly product which the competitive give and take of market participants is unlikely to mitigate.

Fourth, the provision for application of NGA § 5 to rate revisions, as stated in paragraph 10001(c)(3), is a necessary and proper safeguard against unjust, unreasonable, unduly discriminatory or preferential rates and service. In terms of perfecting this provision to make it more useful as a practical matter, AGD recommends that reasonably prompt deadlines be included as to Commission action on any complaints as well as any further Commission remedy developed pursuant to a complaint. The present and future dynamics of the natural gas marketplace need an equally dynamic and efficient process for resolving complaints in a timely, and therefore effective, manner. A complaint process

which six months or more after the fact finds that a marketer, broker, producer, industrial user, LDC or other shipper should have been permitted to move gas six months earlier is simply not an effective remedial process.

Finally, § 10001 appears by its terms to be limited to facilities "to provide transportation service," § 10001(b)(1), as opposed to facilities which provide transportation or sales service. It is certainly true that pipeline transportation of gas owned by others has become the dominant portion of pipeline throughput in recent years. By the same token, however, a substantial portion of throughput remains pipeline sales volumes, and there does not appear to be any particularly sound public policy rationale for excluding facilities for sales service from the optional procedures section. To the contrary, sales service continues to play a critical role for most LDCs as a part of a portfolio of gas supplies necessary to serve retail markets. Accordingly, AGD suggests that § 10001 be revised to include facilities for the transportation or sales of gas.

Section 10002 -- NGPA § 311 Transportation. NGPA § 311 was originally intended to facilitate access by the pre-1978 "interstate" gas markets to "intrastate" gas supplies. Its use has quite obviously expanded, and substantially so, beyond that original intent. In many respects this development has been favorable, e.g., constructive competition has been enhanced, alternative supply arrangements have been developed and more quickly

consummated, throughput has been increased and market efficiencies have been gained. These positive developments have not, however, been without costs, e.g., impairment of service to existing customers and, in the case of LDC bypass, higher costs for most consumers (generally residential, commercial and industrial users not able to hook-up directly to a pipeline), stranded LDC investment and redundant pipeline facilities. A reasonable course for public policy at this juncture in terms of "fine-tuning" § 311 would seem to be one which optimizes the positive contributions produced by § 311 and minimizes the "downsides."

As drafted, the revision to § 311 set forth in § 10002 does optimize the benefits by expanding the class of § 311 users to include "any other person." Unfortunately, § 10002 is asymmetrical. It does nothing to minimize adverse consequences, and, indeed, it exacerbates those consequences because of its one-sidedness in merely expanding its application to "any other person."

AGD supports the expansion of the "class" of § 311 users so long as this revision is accompanied by reasonable safeguards to minimize adverse consequences associated with impairment of service to existing customers and LDC bypass. We submit that the public utility obligations of LDCs and, perhaps more importantly as a practical matter, retail market reliance on LDCs and their utility system infrastructure warrants these reasonable safeguards.

More specifically, AGD suggests that the revised \$ 311 service be accompanied by an expedited prior notice and protest procedure limited to claims of impairment of service to existing customers and LDC bypass. If no protest is filed within a short period after public notice, say, 14 days, the \$ 311 service would proceed. If a protest is filed on impairment of service grounds, the Commission would resolve it expeditiously through summary procedures. If a protest is filed on grounds of bypass, the Commission would be empowered to grant or deny the \$ 311 service depending upon whether the affected LDC is ready, willing and able to provide service on terms and conditions prevailing under applicable State or local regulation.

The above-explained impairment of service safeguard is necessary to assure that existing customers already using and relying on their rights or entitlement to pipeline capacity will not have their rights diminished or degraded by the new service. Some reasonable "check" for existing users seems fair given the equitable position of those users on a "first come, first served" rationale, their reliance on their present service entitlements and, in the case of LDCs, their utility obligation and retail market reliance on their service.

The bypass safeguard is intended to provide some reasonable measure of harmony with and deference to State law. If an LDC is doing all it is authorized to do under applicable State or local

regulation, then that LDC is competing as best as it can. And, if in spite of the LDC's best "competitive" efforts, the bypassing industrial user, for example, wants a "better deal," it has a forum where it can present its case for that relief -- the applicable State or local regulatory body.

The implications of bypass can be very significant both in terms of direct and indirect costs to the remaining LDC customers. Granted that the direct costs of staying on the LDC system may be higher for the large industrial user than bypassing the LDC for direct pipeline service, this represents, however, precisely the kind of issue which is best left to the State and local regulatory bodies to assess. Only at that level of government can the full facts, circumstances and implications to all parties (the industrial user, the residential, commercial and industrial users that cannot bypass the LDC, and the LDC) be developed, analyzed, weighed and decided consistently with the economic development, environmental and energy policy desires and objectives of those most affected. AGD strongly urges the modification of § 10002 to provide the foregoing minimum impairment of service and bypass safeguards.

Section 10003 -- NEPA Compliance. AGD endorses and supports these provisions for streamlining and expediting the environmental review process by designation of FERC as the "lead" agency for preparation of environmental documents and by requiring the Commission to permit the applicant, at its expense, to choose a

third-party contractor to prepare the necessary environmental documents. These revisions are a major improvement over the status quo because of both procedural efficiencies gained and potentially greater resources applied.

Section 10004 -- Rates and Charges. AGD supports the revisions to NGA §§ 4(d) and (e) which extend the notice period for rate changes from 30 to 60 days and clarify that the burden of proof for rate increases or decreases remains with the pipeline applicant for a rate change. While these modifications are useful (excepting any provision for "retroactive" refunds, which AGD opposes), further amendments to NGA § 4 are necessary to assure a fairer rate setting process by reducing the inequities in present law which result in disproportionate pipeline leverage over its customers, sales and transportation alike. Thus, AGD recommends that § 4 be amended to remove the rate-filing suspension period and replace it with a requirement that:

- (1) no rate change shall be effective until approved by FERC;
- (2) FERC shall issue a final order approving or disapproving any filed rate within 12 months of such filing; and,
- (3) no rate change may be filed while a prior rate change is pending before FERC.

Under NGA § 4, interstate pipelines have the virtually unfettered right to file for rate increases at any time. The NGA

imposes no limit on the amount of such rate increases or their frequency. The Commission may suspend the effectiveness of the rate filing for five months, after which it becomes effective on motion of the pipeline subject to refund (in the case of a rate increase) unless the Commission has finally ruled on the rate filing during the five-month suspension period.

This system of rate regulation places pipeline customers at a distinct disadvantage. As a practical matter, few rate cases are resolved by Commission order within the five-month period. Customers who object to a filed rate are thus put in an untenable position. On the one hand, they may engage in meaningful and time-consuming settlement negotiations or litigation and allow the filed rates to go into effect, thereby subjecting their markets to higher, unjust and unreasonable rates and jeopardizing those markets. Or, on the other hand, they may be driven to a less than favorable settlement within the five-month suspension period to avoid the market disruption which would arise if the rates went into effect as filed.

Pipelines are well aware of the bargaining leverage they have over their customers in this respect, and they take full advantage of their statutory rate-filing and rate-setting prerogatives, to the clear detriment of customers. The customers' refund "remedy" is simply not an effective deterrent here because market loss cannot be remedied by refunds. Further, even though refunds may have to be made by the pipeline, the fact remains

that the pipeline has collected the funds from its customers during the pendency of the rate case which may take two, three or more years. Even with interest on refunds, this rate collection system represents an attractive method of forced "borrowing" of capital from customers. The problem is exacerbated further by the fact that there is no proscription on how many rate cases a pipeline may have pending at any one time. This "pancaking" of rate increase filings can literally overwhelm the Commission and the pipeline customers.

From a pipeline customer perspective, the pipeline rate collection system is broken and should be fixed in this legislation. The need is clear. Pipeline rate increases for sales and transportation services can have severely debilitating consequences on the ability of producers, marketers, brokers, end-users and LDCs to meet demands for gas at competitive prices. Moreover, there is no good reason for maintaining the present system when a viable, fairer system is available.

The practicality of AGD's recommendation is emphatically demonstrated by state agency experience. State public utility commissions around the country routinely process large and complex cost of service rate cases under methods very similar to the method proposed here by AGD, that is, required Commission action on a rate filing in one year or less, no collection of filed rates until approved, and no "pancaking" of rate filings. This

is hardly a "radical" or novel approach to the rate-setting process. There may well be some modifications to the form and content of pipeline rate filings to make this system work efficiently, e.g., more descriptive detail as to the specific changes in pipeline costs of service necessitating the rate increase; more comprehensive explanations of the need for the rate change, etc. But, these are relatively minor implementing features which would flow naturally from the system proposed here.

AGD strongly urges the Committee to take this opportunity to adopt meaningful revisions to the NGA § 4 rate-setting process. Today that process is designed for delay and tilted grossly in favor of the pipeline. Fundamental fairness, efficiency and the enhanced competitive nature of the gas industry demand a better rate-setting process. No "pancaking" of rate filings, no collections until approved and required Commission action in a year or less are workable improvements which should be adopted.

Section 10005 -- Rulemaking Procedures. AGD does not object to this amendment to the DOE Organization Act which appears essentially to codify existing law. See, e.g., Panhandle Eastern Pipe Line Co. v. FERC, slip op. at 5-6 (D.C. Cir. June 29, 1990). So long as the substantive NGA standards covering the issuance of certificates of public convenience and necessity and the authorization of abandonment remain unchanged, proceeding by rulemaking, as opposed to case-by-case adjudication in all instances, may reasonably expedite Commission decision-making.

Section 10006 -- Review of Commission Orders. AGD endorses all NGA and NGPA revisions made in § 10006 with respect to deadlines for Commission action on rehearing applications and to abbreviating and streamlining the initial court review process. These are reasonable, workable modifications which expedite decision-making without prejudice to due process considerations. A timely, final decision, whether favorable or not, at least provides parties with a measure of certainty as to the ground rules affecting business decisions and thereby facilitates private sector efficiencies.

The rehearing stage of FERC decisions is often problematic in terms of promptness of final action. There are, however, other critical points in the FERC, NGA/NGPA decision-making process which are equally problematic. These administrative "bottlenecks" occur at the Administrative Law Judge (ALJ) initial decision juncture, at the Commission level on review of ALJ decisions and at the Commission level on matters where an ALJ decision is not involved. An unintended and unfortunate consequence of the § 10006 deadline for FERC action on rehearing applications may be to increase delay at these other key points in the Commission's decisional process if the Commission tries to "compensate" for the loss of time which would otherwise be available to it.

AGD strongly urges this Committee to go a step further and establish deadlines for ALJ initial decisions in adjudicated

cases, for Commission action on review of ALJ initial decisions and for Commission action where no ALJ decision is required. A reasonable deadline for initial decisions would be 120 days after the close of the hearing record, a reasonable deadline for Commission action on review of an initial decision would be 120 days after the initial decision, and a reasonable deadline for Commission action on matters where no ALJ decision is involved would also be 120 days.

This additional step is necessary and proper for several reasons. First, it addresses known administrative "bottlenecks" in the decision-making process and would thereby expedite decision-making. Second, it addresses an unintended, but probable consequence of the § 10006 rehearing deadline, *i.e.*, simply moving delay back further down the line of decision-making. And, third, competitive markets are more efficient with timely governmental decisions where such government intervention obtains.

Section 10007 -- Antitrust Relief. AGD supports the limited antitrust relief provided in this section for independent producer cooperatives with the proviso that the exclusion of otherwise qualified pipeline and LDC affiliates be removed. Section 10007 should facilitate the formation of producer cooperatives which would in turn facilitate the development of supply sources that are more attractive and therefore more readily marketable to LDCs.

The section applies only to groups of "independent producers," a term defined as any person whose natural gas production does not exceed 6 million cubic feet per day and is not an affiliate of a pipeline or LDC. AGD submits that the most pertinent indicia here of ability to market gas is the amount of production controlled, not corporate affiliation. The central notion of this section is that cooperative ventures by smaller producers will enable those producers more readily to market their product. If LDC production affiliates which would otherwise qualify by size of production are excluded from such cooperative ventures, the ability of the venture to develop more marketable increments of gas is diminished proportionately.

If the affiliate exclusion is premised on a concern about "sweetheart" deals between affiliates, the Committee should be aware that LDC purchases from their production affiliates are probably more rigorously scrutinized (by state regulatory authorities) than purchases from nonaffiliates. The spectre of a detailed, "20/20 hindsight" review of such transactions by State public utility commissions reinforces arms-length bargaining with affiliates and is itself more than sufficient reason to treat such affiliates as nonaffiliate producers for purposes of cooperative marketing ventures.

Section 10008 -- Vehicular Natural Gas (VNG) Jurisdiction.

AGD strongly endorses the clarification of the scope of federal

jurisdiction as set forth in § 10008 with respect to VNG activities of LDCs and NGA § 7(f) companies. Natural gas vehicles (NGV) are one of the most promising markets for the gas industry and should be encouraged in every way. The favorable clarification of "hypertechnical," unintended legal impediments to the full development of VNG, as in § 10008, is an eminently sensible and essential strategy to nurture and promote VNG. It is rare indeed for natural gas legislation to be truly noncontroversial, but § 10008 is such a situation.

NGVs present an almost unparalleled opportunity for the country and for all elements of the gas industry. Wide-scale NGV use can improve air quality, reduce reliance on oil imports, reduce the country's balance of payments, optimize efficient energy consumption through direct use of natural gas, increase markets for all segments of the gas industry, and maximize utilization of the industry's production, transmission and distribution infrastructure. Section 10008 contributes to the realization of these objectives and should be adopted.

COMMENTS ON

SENATOR BINGAMAN'S AMENDMENTS

Senator Bingaman has proposed a series of amendments to the natural gas title of S. 341. The objective of the amendments is to streamline further the traditional NGA § 7 certificate process. With all due respect to other, more novel approaches to

increase the efficiency of the natural gas regulatory process, AGD commends Senator Bingaman's focus on the NGA § 7 certificate process and supports all of his amendments. Minor, technical revisions to a few of those amendments would produce even more useful improvements in the process, and we recommend the Committee's consideration of those revisions as described below.

1. Environmental Contractors. This is a positive, perfecting amendment to § 10003(b) of S. 341 in that it allows the applicant's selection of a third-party environmental contractor from a list of such contractors designated by FERC, as opposed to using a single FERC-selected contractor.

2. Environmental Assessments (EA). Requiring FERC to permit an applicant-prepared EA is reasonable given the higher probability of necessary resource being timely applied and the inherently preliminary nature of an EA.

3. Ex Parte Rules. It is appropriate that consultative dialogue between federal agencies in the NEPA process not be governed by ex parte rules. Though not addressed by this amendment, the issue of consultative dialogue among FERC commissioners is an appropriate subject for the Committee's review as well. FERC is intended to be a "collegial" body. Yet, the "Sunshine Act" requirements make it very difficult for the commissioners themselves to engage in the kind of open and frank exchanges of opinion that are commonly held among colleagues. The Sunshine

Act may operate to drive these kinds of discussions to the staff, rather than commissioner, level, and it may thereby overly inhibit the Commission's capacity to function efficiently. Obviously the Commission should not be excluded in all respects from the Sunshine act, but AGD respectfully suggests that the Committee consider some carefully crafted mechanism to facilitate a reasonable measure of private, collegial discourse among FERC commissioners.

4. Unopposed Applications. AGD heartily endorses this amendment and suggests that it be expanded somewhat to provide for a project proceeding as unopposed even where a protest is filed in the 60-day period if that protest is withdrawn or otherwise resolved within 30 days following the 60-day notice period. It may well be that a protest was interposed because of a misunderstanding about some aspect of the project or that the protesting party and the applicant can readily resolve any issue which triggered the protest. In such cases, the project should be permitted to proceed as "unopposed."

5. Replacement facilities. AGD supports this codification of historic Commission practice. See 18 C.F.R. § 2.55(b).

6. Conclusive Evidence of Need. AGD members have experienced delays in fully subscribed FERC projects because of the presence of "competing" applications which did not have such customer support. There is no good reason for delays of this sort,

and AGD accordingly supports the amendment as a reasonable response to the so-called Ashbacher issue and as an appropriate way to deal with "spoiler" projects.

7. Phased Certificate Proceedings. AGD supports this amendment as a reasonable expediting measure.

8. Priority Procedures. AGD supports this technique for procedural expedition on the understanding that substantive NGA standards remain applicable to such projects.

9. Nonjurisdictional Facilities. AGD endorses this amendment as a reasonable and necessary restraint on the Commission's jurisdictional reach. Facilities for the local distribution of natural gas are often associated with NGA jurisdictional projects. Those local facilities are specifically exempted from NGA regulation pursuant to § 1(b) of the Act. Moreover, many State and local laws apply to distribution facilities, and there is accordingly simply no need for additional review by FERC as part of its NEPA responsibilities over jurisdictional projects or otherwise.

THE ADMINISTRATION'S
NATIONAL ENERGY STRATEGY (NES)

The details of the Administration's NES have only recently been disclosed. Many of the concepts contained therein are similar to those in S. 341. To the extent this is so, AGD's comments herein on S. 341 and Senator Bingaman's amendments are equally pertinent. AGD is presently reviewing the Administration's proposed bill and will provide the Committee additional comments on it as appropriate at a later time.

AGD has reviewed one of the central features of the Administration's proposal -- the abolition of FERC and the transfer of its functions to a DOE office. AGD opposes this feature of the NES. As detailed in these comments, AGD agrees that many aspects of the federal natural gas regulatory process can and should be streamlined so that the market demand for gas can be satisfied in a timely way, but the Administration's proposal to abolish FERC implies that federal regulation is no longer needed in the natural gas industry. The fact is that most interstate gas pipelines have monopoly-like market power in their service relationships with local utilities. As long as this condition prevails, AGD's position is that some federal regulation of pipelines is essential to protect local utilities and the nation's gas consuming public. AGD is also convinced that the retention of FERC will impart a desirable measure of continuity and stability to the

natural gas industry, an industry which expects to expand its share of the nation's overall energy market in the near future.

CONCLUSION

AGD appreciates the opportunity to comment on S. 341 and Senator Bingaman's amendments. We are fully prepared to assist this Committee in the development of a more efficient natural gas regulatory structure that will further enhance the gas industry's ability to obtain for society the maximum beneficial use of natural gas.

UNITED
DISTRIBUTION
COMPANIES

Ronald D. Jones
CHAIRMAN

March 12, 1991

The Honorable J. Bennett Johnston
The Honorable Malcolm Wallop
United States Senate
Washington, D.C. 20510

Re: United Distribution Companies' Views on Natural Gas Provisions of S.341, the
National Energy Security Act of 1991 and Related Legislation

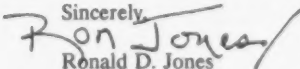
Dear Mr. Chairman and Senator Wallop:

United Distribution Companies is a group of 40 local distribution companies that serve nearly 12 million residential, commercial, and industrial consumers of natural gas throughout the 15 states extending from New York to Colorado, including Minnesota and Kentucky. Thus, UDC has a vital interest in the natural gas provisions of S. 341, the comprehensive National Energy Security Act of 1991, which the Energy and Natural Resources Committee considered at its March 7, 1991 hearing.

UDC supports the goal of this legislation to achieve maximum efficient utilization of natural gas supplies through streamlined administrative procedures. However, the emphasis of the bill is to encourage rapid construction of pipeline capacity through deregulation. Increased pipeline capacity alone does not guarantee increased or more efficient development of gas reserves or new markets for gas. Maximizing development of natural gas markets should also include incentives to promote research and development for new and emerging end-use technologies. For example, clarifying that natural gas for vehicle use is non-jurisdictional is important to encourage the commercialization of NGVs.

In addition, UDC believes refinements to S. 341 are essential to achieve a natural gas industry in which fair, non-discriminatory opportunities to compete are available to all segments of the industry, including LDCs. Indeed, with the many changes made by the Federal Energy Regulatory Commission in recent years, some of the proposals may be unnecessary. UDC hopes that you will give the attached outline of its positions careful consideration in the context of the ensuing debate.

UDC requests that you include the attached statement of its positions in the record for the March 7 hearing. We welcome any opportunity to meet with Committee members and your staffs to further discuss UDC's interests. Thank you for your consideration.

Sincerely,

Ronald D. Jones

cc: All Members of the Energy and Natural Resources Committee
520 Madison Avenue, New York, N.Y. 10022, 212/715-8120 Telefax: 212/715-8500

UNITED DISTRIBUTION COMPANIES

Ronald D. Jones
CHAIRMAN

**SUMMARY OF POSITION
ON PROPOSED NATURAL GAS LEGISLATION**

March 12, 1991

I. The Local Distribution Company Members of UDC

The 40 local distribution companies (LDCs) that are members of United Distribution Companies (UDC) play a vital role in developing and maintaining gas markets. LDCs provide the essential final link in moving natural gas from the producing fields to the burner tips of consumers through thousands of miles of integrated intrastate pipeline and distribution facilities.

The member companies of UDC deliver approximately 25% of the natural gas service available in the United States, serving nearly 12 million residential, commercial and industrial consumers throughout the 15 states extending from New York to Colorado. (A list of UDC member companies and the principal areas they serve is attached as Appendix A.)

II. LDCs Are Working Diligently to Compete

LDCs are working diligently to compete with direct suppliers to serve industrial markets and to provide non-discriminatory access to their distribution systems for customers buying gas from unregulated sellers within the framework created by federal open-access transportation programs. In cooperation with state and local regulatory authorities, LDCs have developed a wide variety of competitive services and innovative rate design options to meet market challenges. (Attached as Appendix B is a paper describing the various services offered by UDC member companies.)

However, because of their public service obligations, LDCs generally remain subject to comprehensive regulation by state and local authorities according to traditional public interest standards rather than solely the competitive market basis encouraged at the federal level. Legislative efforts to enhance the role of competition in the natural gas industry must not overlook this reality, but should look toward solutions that fit the totality of the natural gas industry.

III. UDC Supports the Legislative Objective to Promote Efficient Development of Natural Gas Markets Through Streamlined Regulation

UDC generally supports the objective of the legislation to encourage efficient use of natural gas as a key component of a national energy security policy. We are concerned, however, that the present proposals to substantially deregulate pipeline construction will not prevent wasteful duplication of facilities, and therefore, will fail to accomplish that objective.

The proposed legislation encourages increased pipeline construction, but maximizing development of natural gas markets also requires incentives for increased research and development for new and emerging end-use technologies. For example, assuring federal and state deregulation of natural gas sales for vehicle use by the general public is an important means of developing new and efficient gas markets. Vehicular natural gas has the added benefits of being a clean-burning and abundant domestic fuel that can help reduce dependence on imported oil.

UDC is not offering detailed alternative proposals at this time. It is essential, however, that Congress consider refining the current provisions for deregulated pipeline construction options to encourage maximum utilization of existing LDC facilities.

IV. Legislative Proposals Should Focus on Efficient Access to Reasonably Priced Gas

The legislative proposals to expedite pipeline construction fail to differentiate the construction of new facilities to overcome apparent bottlenecks in the transportation of gas from new production areas to incremental markets, from construction of facilities within the market area to provide direct service to large volume customers through duplicative facilities.

UDC is not opposed to reasonable efforts to reduce regulatory barriers that may impede timely construction of pipelines to obtain access to gas reserves. UDC opposes mandatory hook-up proposals, however, because of the serious potential they pose for degradation of service to LDCs.

Thus, the focus of legislative reform should not be on unrestrained construction of more pipeline capacity per se, but rather on encouraging efficient access to reasonably priced gas. Expedited or non-certificate options should be tailored to avoid duplication of existing LDC facilities. That can be accomplished by integrating the use of LDC facilities to the maximum extent possible in arrangements to provide service in the market area.

V. UDC Suggests Refining the Non-Certificate Option to Achieve Meaningful Competitive Opportunities

UDC offers for consideration the following conceptual approaches that would better enable LDCs to participate in competitive market opportunities.

- a. **Optional procedures should avoid uneconomic duplication of facilities.** Facilities could be constructed pursuant to the optional procedures only after demonstrating that the facilities would integrate existing LDC facilities and services to the maximum extent possible. Encouraging deliveries of gas to existing LDC systems promotes efficient market development by avoiding wasteful duplication of existing facilities.
- b. **The degree of both state and federal control should be the same whether an interstate pipeline or LDC provides service.** LDCs seeking to compete for non-core markets deserve a level playing field. To accomplish even-handed competition the legislation must provide, at a minimum, that if non-LDC competitors are permitted to serve consumers pursuant to unregulated non-certificate options, then an LDC should have the opportunity to provide service within its service territory (if established by state law) pursuant to the non-certificate option and not subject to state regulation. Moreover, take-or-pay and similar costs obligations to pipelines should not preclude LDCs from competing.

VI. UDC Opposes Relaxation of the Section 311 Requirements

UDC opposes proposals to relax or eliminate the Section 311 "on behalf of" standard because they will create overwhelming competitive advantages for pipelines to construct facilities that may duplicate existing distribution facilities or serve customers that otherwise would be served by the LDC. Section 311 should continue to serve its basic function to integrate interstate, intrastate and LDC gas systems to best provide reasonably priced gas to meet consumer demand.

The proposal to allow transportation and construction of facilities by a pipeline on behalf of any other person, free from any Commission certificate or conditions, and with the costs rolled into its rate base, will destroy any incentive for pipelines to utilize the optional "at risk" certificate procedures and will fail to provide fair competitive opportunities for LDCs.

Thus, at a minimum, UDC supports requiring specific prior notice to an LDC serving the intended beneficiary of a proposed Section 311 project and to the appropriate state or local regulatory authorities. In addition, it is essential to exclude Section 311 facilities from the operator's jurisdictional rate base. Only those parties receiving the benefit of Section 311 service should be responsible for the costs of the facilities.

VII. Conditions Necessary to Support Deregulation of Pipeline Sales Rates Do Not Presently Exist in the Natural Gas Industry

The National Energy Strategy Act, recently forwarded to Congress by Secretary of Energy Watkins, proposes to deregulate pipeline rates in competitive markets. The essential prerequisite for deregulation of sales rates is actual comparability of pipeline sales and transportation services. Comparability of service can only be determined on a case-by-case basis with full understanding of the unique configuration and operations of each individual pipeline.

UDC believes the existing Commission settlement procedures provide an appropriate vehicle for establishing that adequate competition and comparability are present in a market or on a particular pipeline. That determination should be made based on the agreement of the customers and not forced on them through the Commission's hearing process for contested issues.

UDC opposes the suggestion that pipeline transmission rates could be deregulated. Pipelines clearly have market power over captive LDC customers. Moreover, pipelines have market power even over those LDCs that obtain various services from different pipelines. Customers served by multiple pipelines often cannot obtain adequate capacity on any one of the pipelines and portions of many LDC service territories are often captive to an individual pipeline.

VIII. UDC Supports the Proposed Administrative Procedural Changes

UDC supports the proposals of S. 341 to streamline the administrative procedures of the Federal Energy Regulatory Commission. UDC also recommends:

- a. time limits for the Commission to issue orders on initial decisions by administrative law judges;
- b. greater flexibility for pipelines to undertake timely repair or in-kind replacement of deteriorating facilities; and
- c. automatic Commission authorization of unopposed certificate applications so long as adequate and informative notice is provided to affected parties, including LDCs.

IX. UDC Supports the Proposals to Streamline Environmental Review

UDC supports the proposal included in Senator Bingaman's amendments to S. 341 to clarify that the Commission shall have no responsibility or right to review non-jurisdictional facilities that may be related to or interconnect with jurisdictional facilities. The federal environmental review should not duplicate or intrude on environmental authority vested with the state and local authorities.

UDC looks forward to working with the Committee to establish a statutory framework for expanding the role of natural gas in the Nation's energy policy, including appropriate recognition of a key role for LDCs. For further information on UDC's positions, please contact Ronald Jones, Chairman of UDC, (212/715-8120) or Roberta L. Halladay, UDC General Counsel (202/467-7045).

APPENDIX A

Members of United Distribution Companies

The Member Companies serve 12,000,000
residential, commercial and industrial gas customers
with an annual throughput of 3,200 Bcf

<u>Company</u>	<u>State of Operation</u>	<u>Principal City Served</u>
BATTLE CREEK GAS COMPANY	Michigan	Battle Creek
CENTRAL ILLINOIS LIGHT CO.	Illinois	Peoria
CENTRAL ILLINOIS PUBLIC SERVICE COMPANY	Illinois	Quincy
CITIZENS GAS FUEL COMPANY	Michigan	Adrian
COLUMBIA GAS OF KENTUCKY	Kentucky	Lexington
COLUMBIA GAS OF MARYLAND	Maryland	Hagerstown
COLUMBIA GAS OF NEW YORK	New York	Binghamton
COLUMBIA GAS OF OHIO	Ohio	Columbus
COLUMBIA GAS OF PENNSYLVANIA	Pennsylvania	Pittsburgh & York
COMMONWEALTH GAS SERVICES, INC.	Virginia	Richmond
THE DAYTON POWER AND LIGHT COMPANY	Ohio	Dayton
THE EAST OHIO GAS COMPANY	Ohio	Cleveland
EQUITABLE GAS COMPANY	Pennsylvania	Pittsburgh
HOPE GAS, INC.	West Virginia	Clarksburg
ILLINOIS POWER COMPANY	Illinois	Decatur
INDIANA GAS COMPANY, INC.	Indiana	Muncie
KOKOMO GAS AND FUEL COMPANY	Indiana	Kokomo
MICHIGAN CONSOLIDATED GAS COMPANY	Michigan	Detroit
MICHIGAN GAS COMPANY	Michigan	Three Rivers
MICHIGAN GAS UTILITIES COMPANY	Michigan	Monroe
NATIONAL FUEL GAS DISTRIBUTION CORPORATION	New York & Pennsylvania	Buffalo & Erie
NIAGARA MOHAWK POWER CORPORATION	New York	Syracuse
NORTH SHORE GAS COMPANY	Illinois	Waukegan
NORTHERN ILLINOIS GAS COMPANY	Illinois	Rockford
NORTHERN MINNESOTA UTILITIES	Minnesota	Cloquet
OHIO GAS COMPANY	Ohio	Bryan
ORANGE & ROCKLAND UTILITIES, INC.	New York & Pennsylvania	Spring Valley
THE PEOPLES GAS LIGHT AND COKE COMPANY	Illinois	Chicago
THE PEOPLES NATURAL GAS COMPANY	Pennsylvania	Pittsburgh
PEOPLES NATURAL GAS	Nebraska, Kansas, Iowa, Minnesota & Colorado	Omaha
THE RIVER GAS COMPANY	Ohio	Marietta
ROCHESTER GAS AND ELECTRIC CORPORATION	New York	Rochester
SOUTHEASTERN MICHIGAN GAS COMPANY	Michigan	Port Huron
UNION ELECTRIC COMPANY	Missouri & Illinois	Jefferson City & Alton
VIRGINIA NATURAL GAS, INC.	Virginia	Norfolk
WEST OHIO GAS COMPANY	Ohio	Lima
WISCONSIN FUEL AND LIGHT COMPANY	Wisconsin	Manitowoc
WISCONSIN GAS COMPANY	Wisconsin	Milwaukee
WISCONSIN NATURAL GAS COMPANY	Wisconsin	Racine
WISCONSIN SOUTHERN GAS COMPANY	Wisconsin	Lake Geneva

**UNITED
DISTRIBUTION
COMPANIES**

APPENDIX B

**LOCAL DISTRIBUTION SERVICE – THE FINAL STEP
IN MOVING GAS FROM THE PRODUCER TO THE END USER**

Ronald D. Jones
CHAIRMAN

March 1, 1991

Local distribution companies (LDCs) develop and maintain the gas markets and provide the final step in moving natural gas from the producing fields to the burner tips of the end users. With more than 800,000 miles of gas lines they serve close to 52,000,000 residential, commercial and industrial customers nationwide. The forty UDC member companies serve nearly 12,000,000 of these customers. National energy policy should recognize and provide for the key role played by these LDCs.

LDCs pioneered the effort to move from the deep rooted, traditional gas industry relationships between producer, pipeline, distributor, end user and regulatory agency. In addition, LDCs have kept abreast of the many recent developments in the gas industry, as the interstate pipelines have shifted a large part of their activity to transporting gas owned by others. Purchasers of gas, whether they be LDCs or the ultimate end users, not only look to the pipeline for merchant service but also can look to other marketers of natural gas. With the spot market, the future market, and long term contracts, competition for gas supply has arrived. LDCs are securing for their customers the benefits of this increased level of competition for gas supply while ensuring their ability to serve the other needs of their customers.

LDCs have taken major steps at the intrastate distribution level to carry forward these industry changes. A recent survey of UDC members showed that all of the responding companies provide transportation service and balancing or "barking" service. At least 33% of the companies provide storage service.

As the gas transportation network continues to expand, public policy calls for a continuing major role for LDC involvement, recognizing that

- 1) LDCs will adapt and will seek to offer services competitive with other options equally available to their customers.
- 2) LDCs offer environmental, planning and public service benefits not available under any other energy alternatives.
- 3) LDCs should not be unnecessarily disadvantaged in this competition by state or federal policies.
- 4) Federal policies concerning energy choices, consumption, innovative uses and conservation are only achievable at the LDC/customer level.

I. LDCs Have Taken Major Strides to Adapt to the Goals of a More Economically Efficient Market Oriented System

LDCs accept their key role in providing reliable service to their millions of customers, drawing upon an upstream network of facilities starting at the producing fields. Nearly 92,000 miles of gathering lines move the gas from the producers to the mainline pipelines. Close to 275,000 miles of transmission pipelines and storage facilities, some owned by the LDCs, move the gas into the LDCs' 800,000 miles of distribution lines to be delivered to the end users.

Moving gas from the interstate pipeline to the end user is the function of the LDC. LDCs' pipeline networks form a grid permitting the delivery of gas to residential, commercial and industrial customers. LDCs, in touch with their markets, provide coordination, storage, back-up service and other benefits essential to customers and essential to maintaining consistency of services.

As the upstream pipeline companies have made transportation service available, the LDCs changed their operations to provide their customers with lower cost gas supplies. Reduction on gas costs continue to be passed on to customers. UDC recently surveyed its member companies to determine the scope of changes in the business of an LDC. The twenty responding companies to this survey showed the following:

- A) LDCs have adapted to the new gas supply/pipeline industry by providing transportation service and transportation related services as well as the traditional full sales services. Of the responding companies, transportation gas represented 32.8% of total throughput in 1989. This percentage is a significant increase from 6.2% in 1984. Moreover, the transportation percentage continues to grow as the industrial load shifts increasingly toward transportation. On some systems, virtually all of the service to industrial customers is transportation service.
- B) Looking upstream to LDCs use of the interstate pipelines, LDCs caused major shifts. Approximately 29.8% of the LDCs throughput on interstate pipelines in 1989 was end user transportation, a marked increase from the 1984 level of 3.6%. The LDCs source of system supplies showed an increase in spot gas purchases from 1.3% of pipeline throughput in 1984 to 33.4% in 1989.
- C) LDCs are offering an increasingly wider range of transportation and retail services. Again, the 1984-1989 period has seen significant increases in the range, as the following table illustrates.

<u>LDC Services</u>	<u>Percentage of Respondents Offering Service</u>	
	<u>1984</u>	<u>1989</u>
1) Firm Sales	100%	100%
2) Interruptible Sales	79%	67%
3) Transportation (Firm or Interruptible)	58%	100%
4) Firm Transportation	42%	95%
5) Interruptible Transportation	53%	67%
6) Storage	0%	32%
7) Balancing or 'Banking'	32%	100%

- D) All of the surveyed LDCs maintain programs or special tariff provisions designed to retain customers that have competitive options. Ninety-four percent of the reporting companies indicated that their state regulatory commissions encourage these competitive efforts.
- E) LDCs maintain no more firm service entitlements on interstate pipelines than is necessary to meet severe weather peak requirements. Recognizing that this results in capacity availability in other than severe weather conditions, LDC's support the development of capacity brokering, assignment and release programs for firm transportation rights on interstate pipelines.

II. National Energy Should Coordinate With These Developments and Recognize a Major Role for the LDCs

LDCs have always competed with other energy suppliers for new large loads and, as the survey indicates, they have actively done so. They should not now be faced with unfair disadvantages in this competition.

The LDCs serve a major role in marketing gas service to the end users. Federal policy should not be a path toward reducing this role to gain any short term benefits to a selected few through cream skimming. LDCs have adapted to the industry changes to best satisfy the combined goal of economic efficiency and the broad interests of the public.

STATEMENT SUBMITTED FOR THE RECORD BY

Jennifer A. Cates,
Vice President and General Counsel
TEX/CON OIL & GAS COMPANY

ON BEHALF OF
TEX/CON OIL & GAS COMPANY
TRANSOK, INC., and
PSI GAS SYSTEMS, INC.

Before the United States Senate
Committee on Energy and Natural Resources

S. 341, The National Energy Security Act of 1991
Title X, Natural Gas Regulatory Issues

March 4, 1991

STATEMENT OF JENNIFER A. CATES, VICE PRESIDENT AND
GENERAL COUNSEL, TEX/CON OIL & GAS COMPANY

Mr. Chairman, Members of the Committee:

My name is Jennifer A. Cates and I am Vice President and General Counsel for TEX/CON Oil & Gas Company in Houston, Texas. I appreciate this opportunity to speak to you on the pending Senate Bill, S. 341. TEX/CON is a mid-sized oil and gas company which also owns and operates two intrastate natural gas pipeline systems in Oklahoma and Louisiana. It is intrastate pipeline operations which bring me to present this statement.

Joining in these comments are Transok, Inc., and PSI Gas Systems, Inc. Transok, Inc., is an intrastate pipeline owning and operating an intrastate natural gas pipeline system in Oklahoma. PSI Gas Systems, Inc., owns and operates intrastate natural gas pipeline systems in Texas and Oklahoma.

Summary

The purpose of my statement here is to request that this Committee amend the proposed language in S.341 covering "Transportation of Natural Gas Under the NGPA" (Section 10002) in order to prevent undue discrimination against intrastate pipelines and to promote expanded competition in transportation. Attached to my statement is the proposed language for amendment to Section 10002 of S.341. Absent such an amendment, in enacting S.341 the Congress would be codifying a preference for interstate pipelines contrary to the clear intent of the NGPA and contrary to the best interests of the industry and of consumers of natural gas.

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Jennifer A. Cates,
TEX/CON Oil & Gas Company
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Intrastate Pipelines

Under the proposed language of Section 10002(c) existing paragraph 311(a)(1) of the NGPA would be stricken and a new provision would be substituted which effectively would allow the FERC to authorize transportation by an interstate pipeline on behalf of any other person instead of the current provision which limits interstate pipelines to transporting on behalf of intrastate pipelines and on behalf of local distribution companies.

S.341 does not propose to modify paragraph 311(a)(2) of the NGPA under which an intrastate pipeline may transport natural gas on behalf of only an interstate pipeline or a local distribution company served by an interstate pipeline. By relieving interstate pipelines of this constraint but not intrastates, S.341 places the intrastate pipelines at a competitive disadvantage.

Section 311(a) was included in the NGPA to limit the duplication of facilities between interstate and intrastate pipelines in order to create a more cost-efficient environment for the movement of natural gas in this country. Congress recognized that where there was an intrastate pipeline available to move gas from point A to point B, there was no need to have an interstate pipeline construct a facility to move gas between the same points. Section 311 allowed the intrastate pipeline to transport interstate gas through its system without becoming

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subject to full Natural Gas Act regulation; the intrastate pipeline would not need to duplicate existing interstate facilities just to avoid extensive Federal regulatory burdens. Thus, in Section 311 Congress removed the regulatory barriers to free movement of gas. Although we have not been able to quantify the savings to consumers as a result of these paragraphs under the NGPA prior to preparing this statement to you, I believe that the resulting cost savings to the industry and to consumers have been substantial.

While it is appropriate to amend Section 311(a)(2) for intrastate pipelines to be the same as the provision for interstate pipeline transportation, when considering construction S. 341 should differentiate between interstates and intrastates. This is because most states have the authority to regulate intrastate pipelines and such state regulated lines are built pursuant to state regulatory authority not pursuant to Section 311. Such facilities should not also require FERC authorization. This double approval would be duplicative, result in additional costs and would not promote any public interest. In many cases the additional cost and potential regulatory delay may discourage an otherwise beneficial construction project as intrastates must compete with unregulated gathering systems which can move swiftly. FERC authorization of intrastate pipeline

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projects should be limited to those facilities which are designed solely to provide interstate service and which will not provide intrastate services.

The goal of the current energy legislation in S. 341 is stated to be "to encourage the more efficient use of energy throughout the country" [see Section 1002(2)]. Failure to provide equal treatment to intrastate pipelines and interstate pipelines under the proposed amendments to NGPA Section 311 will frustrate this goal. The Senate's proposed language could result in the construction and utilization of unnecessary interstate facilities rather than the use of existing less expensive intrastate facilities. This is a waste of the nation's resources and the increased costs will be felt by shippers and consumers. Available existing capacity in intrastate pipelines may not be utilized without the increased flexibility in moving natural gas which a balanced S. 341 would afford. Freeing up intrastate pipelines from the limits of the current paragraph 311(a)(2) the same way S. 341 would free up interstate pipelines will benefit the industry and the country as a whole.

Conclusion

The amendment we are proposing would provide significant benefits to the industry and the nation's consumers of natural gas. In an integrated national pipeline system there is no basis on which to prefer one segment of the industry over another. By giving all segments of the industry equal and assured flexibility

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in transporting natural gas, the consumers of the nation benefit by a more economical and secure product and a more competitive industry. We're sure Congress would want nothing less.

Proposed Amendment to
S. 341, Section 10002

Page 152 , line 21 - after "Natural Gas Act)." insert the following:

"(d) striking paragraph 311(a)(2)(A), and inserting in lieu thereof the following:

'(2) INTRASTATE PIPELINES -

'(A) TRANSPORTATION. - The Commission may, by rule or order, authorize any intrastate pipeline to transport natural gas on behalf of any other person.'

"(e) renumbering paragraph 311(a)(2)(B) to 311(a)(2)(C) and by inserting the following as a new paragraph 311(a)(2)(B):

'(B) CONSTRUCTION. - The Commission may, by rule or order, authorize the construction of facilities designed solely to transport natural gas in interstate commerce pursuant to subparagraph (A).'"

PREPARED STATEMENT OF
KENNETH L. LAY
CHAIRMAN AND CHIEF EXECUTIVE OFFICER
ENRON CORP.
BEFORE THE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
ON S. 341
THE NATIONAL ENERGY SECURITY ACT

MARCH 14, 1991

PREPARED STATEMENT OF
KENNETH L. LAY, CHAIRMAN
AND CHIEF EXECUTIVE OFFICER,
ENRON CORP., BEFORE THE
COMMITTEE ON ENERGY AND NATURAL
RESOURCES, UNITED STATES SENATE
S. 341, THE NATIONAL ENERGY SECURITY ACT

MARCH 14, 1991

Mr. Chairman and Members of the Committee:

Introduction

My name is Kenneth L. Lay. I am Chairman of the Board and Chief Executive Officer of Enron Corp. I appreciate this opportunity to discuss with you Title X of the National Energy Security Act of 1991 (S. 341), the amendments to S. 341 which were introduced by Senator Bingaman (Bingaman Amendments), and S. 570, the National Energy Strategy Act (NES Act). Enron applauds the leadership of Senators Johnston and Wallop in introducing S. 341, which began the dialogue on much needed legislative reform of the natural gas industry. The subsequent introduction of the NES Act and Senator Bingaman's amendments obviously benefit from the foundation of S. 341.

Enron strongly believes that increased natural gas utilization is a key component in reducing United States dependence on foreign oil and improving the quality of our environment. Natural gas is an energy source that is clean, readily substituted for oil, abundant in supply and economically affordable. Enron is currently in the process of updating its own gas supply/demand outlook which was published two years ago. Preliminary conclusions indicate that the U.S. resource base is even larger than we estimated two years ago. Based on our most recent evaluation, we now estimate the

remaining economically recoverable resource base to be approximately 850 trillion cubic feet (Tcf). This is almost 200 Tcf more than we estimated just two years ago, or a 30 percent increase. When this is added to the 160 Tcf of proven reserves already developed, we estimate that the nation has over a 50 year remaining supply of natural gas at current levels of production. Our revised estimates are based not on discovering resources we did not know about two years ago, but instead on improved technology and improved economics, including tight sands tax credits and lower drilling costs. Even though our updated forecast shows stronger growth, it is probably still too conservative on the role which natural gas can play in the national energy mix. The infrastructure is in place with incremental expansions to serve a much larger national market; however, existing regulatory constraints continue to create impediments to future growth of natural gas demand. Senators Johnston, Wallop and Bingaman, as well as the Administration, obviously share this concern, as evidenced by S. 341 and its amendments and the National Energy Strategy.

I strongly believe that natural gas use should be fostered if, and only if, it achieves cost effective performance given appropriate incentives. However, I believe that in an environment where market forces are allowed to work, natural gas utilization will increase dramatically under that test. I believe that if market forces are allowed to operate, it will become readily apparent that natural gas is abundantly available as a long-term

energy source at economic prices. I therefore enthusiastically support the elements of the legislative proposals before you that would substitute operation of market forces for traditional cost-based regulation of the pipeline industry and lower existing barriers to entry.

We in the industry have to do our part as well and I believe Enron is doing its part. To achieve growth in the use of natural gas for electric generators, by far the largest growth market for natural gas, electric generators must have confidence that supplies will be available at prices they are willing to pay. Enron is selling natural gas at fixed prices for up to fifteen years. To date, we have signed contracts for 560 billion cubic feet of deliveries, including significant quantities to electric generators. Products such as these provide both reliability and price certainty for the electric generators to make new capital plant decisions.

Overview

Enron endorses legislative reform as a means to complete the transition to a competitive market for natural gas and natural gas services. While the Federal Energy Regulatory Commission (FERC) has made positive steps in that direction through pro-competitive regulatory reforms under Order Nos. 380, 436, 500, and their progeny, the very nature of the regulatory process and subsequent judicial review has subjected the transition to continuing regulatory and legal uncertainty. Moreover, major competitive and transitional issues have been addressed seriatim, and comprehensive

regulatory reform which began in the mid 1980's may require another decade without the assistance of legislation which establishes a clear and comprehensive federal policy in favor of the operation of market forces. For some in our industry, the route of continued regulatory reform may be preferred. However, if natural gas demand is to grow to its full potential, Enron believes legislation is necessary at this time. Enron therefore endorses legislative reform aimed at enhancing natural gas utilization through lowering artificial barriers to entry and eliminating market signal distortion resulting from existing regulatory constraints and cost-based rate design. Enron believes that these objectives are accomplished best through a comprehensive federal policy of light-handed, market-based federal regulation which preempts potentially inconsistent state regulation that could directly or indirectly cause a bifurcation of markets or a retreat from pro-competitive federal policies of the last several years. This regulatory scheme should apply uniformly to new entrants and existing natural gas companies and center on three key themes:

- Expediting construction of new pipeline capacity without foregoing environmental protection.
- Regulatory reform based on a foundation of deregulation of rates and services in workably competitive markets and market-based, incentive rate design for services that remain regulated.

- Final resolution of existing regulatory and legal uncertainty pertaining to the recovery of transition costs associated with existing pipelines' certificated service obligations and their diminished merchant role.

In varying degree, all of the pending legislative proposals before this Committee recognize that enhancement of a competitive market for natural gas services is vital to a long-term national energy policy and environmental considerations. However, Enron especially endorses the Department of Energy's approach in Title II of the proposed National Energy Strategy Act (NES Act) which recognizes that lowering the barriers to new entry must be accompanied by increasing deregulation of existing pipelines' rates and services to achieve a competitive market. Enron supports the NES Act's approach of creating a menu of options for new construction and expansion of existing pipeline capacity and its impetus to deregulate rates and services in workably competitive markets. The NES Act evidences recognition that operation of a competitive market requires a level playing field between new entrants and existing natural gas companies.

Enron therefore believes that, with certain modifications and with the addition of several complementary provisions of the natural gas sections of S. 341 and the Bingaman Amendments, the NES Act provides the best framework on which to build comprehensive legislative reform of the natural gas industry. We look forward to

this type of blending as the legislation goes to markup. The following statements summarize Enron's position.

Construction Options

Enron supports legislation creating a menu of options for expediting new construction and expansions of existing pipeline capacity. Specifically, Enron endorses expanding the scope of transportation under Section 311 of the Natural Gas Policy Act and codification of an interstate pipeline's ability to construct facilities of any size or capacity to provide such transportation, without prior notice to or authorization by either the FERC or any state commission. Obviously, all relevant federal and state environmental requirements would continue to apply, but would continue to be administered by the applicable federal or state agency, as is currently the case with construction permitted under Section 311.

Enron also supports the Bingaman Amendments, which it believes would build on and improve the recent progress made by the FERC in expediting processing of traditional Section 7(c) applications.

With minor modifications, Enron also supports the NES Act's Optional Certificate procedures as a more workable alternative to the S. 341 approach to receipt of a certificate after construction has been completed and service has commenced. The NES Act's Optional Certificate procedures grant pipelines which accept the financial risk of a project all of the benefits of the FERC's current OC procedures, without allowing imposition of onerous rate conditions which create only downside but no upside for an

applicant. The NES Act's Optional Certificate procedures also recognize that market forces can be relied on to establish just and reasonable rates, checked by the NES Act's proposed changes to Section 7(a) and proposed Section 7(j)(2), which allow the FERC to retain jurisdiction where necessary to guard against anticompetitive conduct or to ensure that the public interest is served. Enron would suggest that an open access transportation requirement also attach to an OC.

Enron believes that a non-certificate option is unnecessary to lower barriers to entry once traditional Section 7(c) processing is expedited, Section 311 construction and the NES Act's OC procedures are codified, and rate reform is legislated. At that point, light-handed regulation of all natural gas companies is preferable to a bifurcated scheme which attempts to totally or partially deregulate some entrants but not others from the revised scheme of market sensitive regulation. The goal of all legislation should be a level playing field.

Rate Reform

Enron enthusiastically supports the NES Act's approach towards rate reform under Section 4 of the Natural Gas Act. However, Enron believes that the amendments to Section 4 proposed in S. 341 would be counterproductive to a scheme of federal regulation which departs from cost-based regulation where market forces can be relied upon to establish just and reasonable rates.

Enron endorses the NES Act's proposal that upon application of a natural gas company, the FERC may issue an order finding that the

rates and charges of the pipeline for either sales or transportation services in a particular market are not subject to FERC's jurisdiction under the NGA if the FERC finds that the natural gas company has demonstrated that such market is competitive and the company's services are offered on a not unduly discriminatory basis. Further, Enron believes that where a natural gas company is found to provide comparable open access transportation service, its merchant service should be deemed workably competitive without a further showing. The Wellhead DeControl Act of 1989 evidences a Congressional finding that the wellhead market is competitive. Where a pipeline also transports its own merchant gas on comparable terms and conditions as third-party gas, the market for commodity sales is inherently competitive under open access transportation. Additionally, Enron believes that legislative reform should indicate a clear preference for market-oriented, incentive rate design for services that remain subject to rate regulation. For example, even in a market which is not workably competitive with respect to transportation services, only firm and not interruptible transportation rates should be regulated where a natural gas company provides open access transportation service and either permits brokering of its firm capacity (therefore creating competition for provision of interruptible service) or has excess firm capacity (so that the availability of firm capacity at a regulated rate provides in essence a check on the pipeline's market power over interruptible transportation). Additionally, legislation should direct the FERC to consider incentive rate

designs which permit the natural gas company to capture a portion of efficiency gains due to increased throughput or reduced costs.

Most important, however, is legislative recognition that, for market forces to operate efficiently, the transition costs resulting from FERC initiatives which held interstate pipelines to their certificated service obligations as merchants of natural gas and their underlying gas purchase contracts with producers, while permitting their sales customers to convert from pipeline sales service to open access transportation, must finally be dealt with on an equitable basis. These transition costs include not only take-or-pay and contract reformation costs paid to suppliers, but also underrecovered purchased gas costs which have accrued in Account No. 191 and capacity in upstream pipelines (858 capacity) contracted for on a long-term basis to serve a merchant function which now has diminished significantly. These transitional cost issues have become increasingly critical as former sales customers on most pipelines approach cumulative 100 percent conversion rights and a large percentage of service agreements expire in the 1991-92 time frame. Existing FERC policy prohibiting the imposition of any exit fee on customers converting from sales service to transportation or on customers leaving the system has failed to adequately address how these transition costs can be equitably apportioned. Judicial review has created legal obstacles to FERC attempts to permit direct billing of Account No. 191 balances, and created uncertainty with respect to allocation methodologies for contract reformation costs. Legislation aimed at lowering barriers

to entry could exacerbate the problem if it avoids dealing with the transitional cost issues while creating additional opportunities for former sales customers to leave a pipeline altogether while escaping all liability for these costs.

The NES Act should be modified to specifically address these issues. In the context of a pipeline's petition to deregulate its sales rates in a workably competitive market or in the context of a Section 7(b) proceeding where a pipeline requests abandonment of its Section 7(c) certificate to proceed under the Optional Certificate procedures of proposed Section 7(i), legislation should provide for an abandonment of a pipeline's certificated sales service obligation and termination of its PGA mechanism through direct billing (or refunds) of underrecoveries (or overrecoveries) of Account No. 191 balances. The FERC also should be directed to explore under Section 5 of the NGA whether 858 contracts with upstream pipelines are no longer just and reasonable if they cannot be brokered to provide open access transportation benefits to the downstream pipelines' shippers, and upon such a finding abandonment of the 858 contracts should be permitted under Section 7(b) of the NGA. Alternately, if the 858 contracts are not found to be unjust and unreasonable, then a portion of the costs of those contracts should be apportioned as part of an exit fee to converting customers and customers leaving the system.

Legislation also should direct the FERC to permit pipelines a reasonable opportunity to recover take-or-pay and contract reformation costs through a variety of mechanisms, including exit

fees to customers leaving the system, rate base treatment, the options currently available under Order No. 528, and the option to recover 100 percent of prudently incurred costs if billed through a volumetric surcharge, the collection of which is subject to market forces.

Enron strongly opposes the modification to Section 4 of the Natural Gas Act proposed in S. 341 which would permit the Commission upon any change in rates proposed by a pipeline to order refunds below the pipeline's "last clean rate." The financial integrity of existing pipelines and their ability to attract capital for expansion as well as rehabilitation of existing facilities are as important to increased utilization of natural gas as lowering barriers to entry for new participants. Unlimited and unquantifiable retroactive refund exposure under Section 4 jeopardizes both. Moreover, these changes would create a perverse disincentive for a pipeline to file for a rate decrease, since it could result in refunds below even the decreased level requested retroactively to the filing date. Similarly, the provision could discourage facility expansions and new construction, since filing for a resulting increase in rates could expose the pipeline to retroactive refunds back to the filing date if it fails to justify the increase and the Commission sets a just and reasonable rate lower than the pipeline's last clean rate.

PUHCA Reform

Enron strongly endorses reform of the Public Utility Holding Company Act (PUHCA) to allow the development of the independent

power producer industry. One of the technologies favored by independent power producers is the gas-fired combined cycle turbine, which is the cleanest, most efficient turbine and can be constructed faster than traditional facilities. However, the current restrictions contained in PUHCA prevent this market from growing to its full potential for electric generation.

Deregulation of Imports/Exports of Natural Gas

Enron believes that the possibility of passage of needed legislative reform of the natural gas industry is directly proportional to broad-based support of such legislation by all segments of the industry. To garner support from domestic producers as well as the Canadian community, Enron believes that provisions providing for total deregulation of imports and exports should be deleted. Regulatory reform has succeeded in streamlining regulation of imports and exports and total deregulation is not necessary at this stage of the industry's transition if the cost is lack of support for comprehensive legislative reform of the industry within the United States.

Vehicular Natural Gas

While the natural gas vehicles market may be small nationally, it has the potential to emerge as an important incremental market in large metropolitan areas such as Los Angeles, New York, Houston and Denver, which experience severe pollution problems. Enron believes that federal legislation should create incentives for use of natural gas vehicles while at the same time

deregulating sales of natural gas for ultimate use as fuel in a motor vehicle and preempting state regulation of these sales.

Structural Reform of the FERC

Enron opposes the legislative proposal to establish a Natural Gas and Electricity Administration within the Department of Energy to replace the FERC. The goals underlying the proposal of effective coordination and implementation of federal energy policy and streamlining the decision making process have merit. However, Enron believes that on balance the disadvantages outweigh the advantages. The checks and balances provided by a multiple member Commission are important safeguards, and the goals underlying the proposal can also be met by eliminating the ex parte rules between members of the FERC and Administration officials, and by the streamlining measures proposed in S. 341 and its amendments. However, Enron does support the appointment of an Assistant Secretary of Natural Gas.

Conclusion

In conclusion, Enron applauds the effort of this Committee and the Administration in introducing major legislative reform to expedite completion of the transition to a competitive market for natural gas and natural gas services. By removing existing regulatory constraints, such legislation should permit the market to make economic choices about its fuel of choice for the 1990's and beyond. Enron is confident that in such an environment, natural gas will emerge as the premier fossil fuel due to the abundant supply of this fuel in the United States, its potential

for displacing alternate fuel for industrial uses as well as in the generation of electricity, and the enormous environmental benefits it provides. The proposed legislation, with certain refinements, should permit America to fully utilize its vast natural gas resources.

Thank you.



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INDUSTRIAL USERS URGE SENATE ENERGY COMMITTEE TO MAINTAIN COMPETITIVE MARKETS FOR NATURAL GAS

F. Joseph Graham, Director of Energy Policy and Supply for Union Carbide Corporation, testified before the Committee on Energy and Natural Resources of the United States Senate on March 7, 1991, on behalf of Union Carbide Corporation and the Petrochemical Energy Group ("PEG"). PEG is a coalition of independent petrochemical companies, those not associated with major oil companies.

The Energy Committee's hearing concerned Title X of S. 341, the "National Energy Security Act of 1991, amendments to S. 341, and the President's National Energy Strategy and the National Energy Strategy Act.

Mr. Graham testified:

-- about the need for an abundant supply of reasonably priced natural gas transported and delivered to industrial facilities at just and reasonable rates as being essential for a strong economy, one where American industry can compete effectively at home and abroad; and

-- hopes for an optimum supply of natural gas would be dashed if a competitive market is interdicted or impaired by lack of access to markets or unreasonably high charges to get to market, as imposed by transporters.

"One of our concerns with any legislation is whether the gains achieved by the Wellhead Decontrol Act will be wiped out or impaired by abuse of market power by public utilities. Another concern is whether consumers of gas will be deprived of open access, with comparable service at comparable rates, to the national transportation grid."

Mr. Graham suggested that S. 341 generally met the criteria by which industrial users, the largest of the natural gas consuming classes in the country, would analyze legislation. The one possible exception was new Section 10001, which would create a new "optional" procedure for pipeline construction. That new procedure apparently would allow pipelines to foreclose access to the market by competing sellers or buyers of natural gas, and deletion was recommended. Those portions of the

National Energy Strategy Act relating to "optional" procedures and "non-jurisdictional" pipelines also were recommended to be deleted.

The Committee was requested to establish a national transportation grid, with open, non-discriminatory access for all.



PROCESS GAS CONSUMERS GROUP • THE PENNSYLVANIA BUILDING
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**EXECUTIVE SUMMARY OF THE
STATEMENT OF
THE PROCESS GAS CONSUMERS GROUP**

The Process Gas Consumers Group ("PGC") is an association of industrial consumers of natural gas. PGC members own and operate hundreds of plants in virtually every state in the Nation using natural gas in process gas uses that lack the technical capability to use alternate fuels, or in uses that can utilize alternate fuels. We are vitally interested in the development of a coherent and rational energy policy framework.

- Our interests are driven by the reality that we have two key requirements: First, a reliable gas supply. If our gas supplies for process or feedstock uses are interrupted, plants will close or operations will be curtailed, and operations dependent on process gas would cease and could be permanently damaged. Second, reasonable gas prices. Natural gas prices significantly affect the ability of an industrial gas user to compete in the domestic and international marketplaces. PGC strongly supports continuation of the pro-competitive regulatory policies of the past several years to bring prices in line with market realities.
- Before natural gas is promoted by Federal policy as a "fuel of choice," the impacts of increased demand on those who depend on natural gas should be considered. A policy which encourages additional demand without assuring that the resource base exists to meet demand and at reasonable prices would have grave economic consequences.
- PGC supports a streamlined regulatory process for construction of new pipeline facilities. When the market place signals a need for new facilities, the regulatory process should allow facilities quickly and efficiently to be brought on-line. In addition, liberalization of the "on behalf of" transportation requirement will further promote a truly national marketplace for natural gas.
- Recognizing the right of end users to secure supplies from alternative sources, such as purchase directly from producers, will benefit consumers. Those rights must not be frustrated through any limitations on competitive sourcing for energy supplies.
- Congress needs to exercise its oversight authority to encourage FERC to expedite implementation of pro-competitive regulation and create market sensitive and fairly-priced cost-based rates.
- It is sound regulatory policy to require FERC to take final action in proceedings before it on an expeditious basis.

UNITED STATES OF AMERICA
BEFORE THE
SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES

STATEMENT OF
THE PROCESS GAS CONSUMERS GROUP

MARCH 7, 1990

I. INTRODUCTION

The Process Gas Consumers Group ("PGC") submits this statement to present the views of the industrial natural gas consumer on the natural gas provisions in Title X of S. 341. PGC is an association of industrial consumers of natural gas, organized to promote the development and adoption of coordinated, rational, and consistent federal and state policies with respect to gas use. PGC members own and operate hundreds of plants in virtually every state in the Nation, using natural gas in process gas uses that lack the technical capability to use alternate fuels, as well as in uses that can utilize alternate fuels.

As major energy users, members of PGC are significantly affected by national energy policy and regulation. For many years PGC has actively participated in federal regulatory and legislative energy proceedings. Consequently, we are vitally interested in the development of a coherent and rational energy policy framework. Our interests are driven by the reality that we have two key requirements:

First, a reliable gas supply. If our gas supplies for process or feedstock uses are interrupted, plants will close or

operations will be curtailed, and operations dependent on process gas would cease and could be permanently damaged. Depending on the severity of the interruption, not only the industrial user, but also its employees, the surrounding community, and the nation's economy may be adversely affected.

Second, reasonable gas prices. Natural gas prices significantly affect the ability of an industrial gas user to compete in the domestic and international marketplaces. The pro-competitive regulatory policies of the past several years have started to bring prices in line with market realities. PGC strongly supports continuation of these pro-competitive policies.

II. THE NATURAL GAS RESOURCE BASE

Given this perspective, PGC is somewhat concerned about the impact of Title X of S. 341 as it would implement one of the overall purposes of S. 341 set out in Title I to "encourage increased utilization of natural gas . . . to displace imported oil . . ." In addition, while we generally support federal research and development into efficient uses of energy, we are also concerned about the market impacts of commercialization incentives to utilize natural gas, as suggested in Section 6003 of Title VI, particularly in applications where substitutable fuels are available.

Natural gas currently plays an important role in residential, commercial, and industrial process, feedstock and other applications. Because of its chemical composition and its clean burning characteristics, natural gas is a unique fuel.

Indeed, for process and feedstock applications, gas is the only acceptable fuel. Natural gas' unique characteristics also underlie its attractiveness as a solution to environmental and other issues.

PGC firmly believes that any Federal policy to promote natural gas as a "fuel of choice" should first critically consider both the short- and long-term impacts of increased demand on those who depend on natural gas, including industrial process and feedstock users. That is, before encouraging additional gas use, it is critical to quantify the size of existing and potential markets and to ensure that existing services would not be jeopardized either as to supply or price. Legislation which encourages significant additional demand without assuring that (1) the resource base and (2) the infrastructure exist to meet current and additional demand could have grave and negative economic consequences.

Fundamentally, the challenge is to design an energy policy that uses the nation's natural gas resources in the most effective and responsible manner. Unfortunately, however optimistic one's views may be on the size of the nation's gas reserves, natural gas is a finite resource. Even at current production rates, the nation's gas reserves are projected to last for 35-50 years. At The Department of Energy's December 4, 1989 hearing on the National Energy Strategy in Houston, the situation was aptly characterized as follows:

"Natural gas must necessarily play an important role in our energy future. That role should, however, be as a bridge to

more stable, long-term alternatives and not the answer to our energy problems. Our policy should not be based on burning up our 35 to 50 year supply of this premium fuel and leaving it to our children to find alternatives or accept a drastic reduction in their standard of living. Gas is not the answer, it is rather one way to buy time to find the answer."

Hearing Statement of L.G. Brackeen, Houston Lighting and Power Co., at p. 4.

Imported natural gas supplies can, at most, provide a useful supplement to domestic resources. Current natural gas imports come primarily from Canada. Pipeline capacity available for Canadian imports is currently limited to approximately 1.4 Tcf annually, with planned capacity expansions aggregating additional capacity of approximately 700 to 800 Bcf per year. Over the long run, however, the constraining factor will be availability of capital resources. While current volumes may be relatively secure, especially given the Free Trade Agreement, the ultimate level of such imports that can be sustained reliably is questionable.

Additionally, some liquified natural gas ("LNG") is imported. Imports of LNG amounted to less than 100 billion cubic feet in 1989, but are projected to expand by 2010. Those volumes of imported natural gas can satisfy only a small portion of domestic needs. Reliance on imported LNG to satisfy projected demand creates distinct problems. There is a greater likelihood of supply disruption. Certainly, there is a significant potential for LNG imports to be interrupted, as has been the case in the past. Even if imported volumes remain available, they tend to be higher priced and may well be subject to greater price

volatility. Indeed, political developments could raise the specter of domestic consumers being held "hostage" to unreasonable price and other contract demands. In addition to potential political difficulties, LNG must be imported by ocean-going tankers -- an inherently less reliable mode of transport than pipelines. Finally, the increased potential for supply disruption is exacerbated by the fact that there are limitations on the ability to store natural gas.

III. FEDERAL CERTIFICATION, CONSTRUCTION, AND TRANSPORTATION

Of course, regulatory constraints may also interfere significantly with natural gas resource availability. For example, regulatory barriers hamper the development of necessary improvements to the natural gas delivery system. Even if gas supplies are available at the wellhead, it is equally important that the supplies be available in market areas where and when needed. If supplies cannot move through bottlenecks in the delivery system, they may as well remain in the ground.

PGC supports the goals of Title X of S. 341 to streamline the regulatory process for construction of new pipeline facilities. The existing Natural Gas Act ("NGA") Section 7 certification process has justifiably been criticized as unduly cumbersome. Under the current regulations, Federal Energy Regulatory Commission ("FERC") approval of needed facilities may sometimes be delayed for many months or even years while applications are being processed. The removal of regulatory obstacles to the construction of needed pipeline facilities can

allow consumers to receive gas supplies more quickly and enhance the operation of the marketplace. The optional certificate procedures outlined in Title X of S. 341 will help to assure that when new pipeline facilities are needed, the marketplace can select the appropriate facilities and they can quickly and efficiently be brought on line.

As with all pipeline construction, however, FERC must insure that the facilities built are "used and useful," that costs are prudently incurred, and that rates and services are not unduly discriminatory. PGC agrees that pipelines should bear the risk that revenues from construction projects under the proposed optional procedures recover the costs of construction.

PGC also supports the treatment of facilities constructed solely for service under Section 311 of the Natural Gas Policy Act ("NGPA") as nonjurisdictional facilities that may be built without advance Commission approval. Under such treatment pipelines would be free to expeditiously construct facilities needed to receive gas from producers in the field, to deliver gas to interconnecting Section 311 transporters, and to make deliveries directly to end users in qualifying transactions. The flexibility to have such facilities constructed promptly is important to industrial users who depend on natural gas for their manufacturing operations.

Finally, PGC supports the liberalization of the "on behalf of" requirement of Section 311 of the NGPA as proposed under Title X of S. 341. By unlocking gas that was previously trapped

in separate interstate and intrastate markets, Section 311 has played a significant role in promoting the NGPA's goal of developing a national marketplace for natural gas. Section 311 service is widely used and highly valued by all segments of the industry, including industrials.

To achieve Congress' objectives, the NGPA must allow intrastate pipelines to buy and sell gas in other states, and authorize them to transport supplies acquired by interstate pipelines without federal jurisdictional consequences under the NGA. The NGPA must give end users access to suppliers and producers access to markets previously denied them because of the NGA's jurisdictional barriers.

With the advent of Order 436, the FERC's regulations implementing Section 311 have required both interstate and intrastate pipelines to provide non-discriminatory service, insuring all shippers open access to a variety of different markets. NGPA Section 311 is also the only source of authority for transportation of system supplies-through facilities constructed outside of the NGA for transportation under Section 311.

FERC's current "title or transport" rule, however, inappropriately restricts "on behalf of" transactions qualifying under Section 311 to those in which the pipeline or local distribution company ("LDC") takes title to gas or physically transports it. As FERC has recognized, nearly one-third of the 11,000 ongoing Section 311 transactions may not qualify under the

new "title or transport" interpretation of the existing statute's "on behalf of" requirement. That figure alone suggests that the new rule is far too restrictive and will thwart Congress' and FERC's efforts to create a truly national market for gas.

The difficulty with any rule -- such as "title or transport" -- that attempts to enumerate or define the precise circumstances in which the test is satisfied is that it inevitably leaves out legitimate transactions that are within the ambit of what Congress intended by "on behalf of." This may result in unnecessary disruption of service or serious economic impacts on Section 311 shippers forced to purchase more expensive supplies. A better course, as proposed in Title X of S. 341, is to liberalize the requirement to state that the transportation must merely be "on behalf of another person." The principal advantage of this approach is that it permits transactions to go forward on a nondiscriminatory self-implementing basis under Section 311, consistent with the NGPA goal of integrating interstate and intrastate markets. This is appropriate because there may be no substitute for intrastate pipelines with legitimate transactions that do not qualify under the strict "title or transport rule."

IV. COMPETITIVE SOURCING

As indicated above, recognizing the right of end users and others to secure their supplies from other sources will enhance the free operation of natural gas markets and benefit all gas consumers. In past Congresses, legislation has been proposed to

frustrate rights of end users through so-called anti-bypass provisions. Such efforts were strongly opposed by the industrial consumer as well as by pipelines and producers. Attempts to prohibit bypasses reflect the entirely self-serving efforts of certain LDCs to protect their existing regulatory monopolies from competition. Such restrictions would protect LDC shareholders while undermining the competitive position of U.S. manufacturers, harming natural gas producers, and causing generally higher gas prices for all consumers.

Industrial consumers do not desire to bypass LDCs. Typically, potential bypass situations are resolved when LDCs offer industrials more reasonable service or rates. Those few bypass cases which have arisen actually involved healthy competition for customers between LDCs or between LDCs and pipelines, or have involved new service to consumers who were not previously buying from the LDC anyway.

In the past decade, many industrial consumers have spent millions to become fuel switchable. If consumers are unable to use the threat of bypass to win competitive LDC prices, they will be forced increasingly to reduce their use of natural gas by shutting down or moving operations, or by switching to alternates such as fuel oil.

Changes in the regulation of natural gas have made it possible for LDCs and gas consumers to utilize less costly alternatives to purchasing gas solely from pipelines or local utilities. One such competitive alternative is to purchase gas

directly from producers, with interstate pipelines then transporting the gas directly to the end user. This "competitive sourcing" for energy supplies is vital for American industry to compete in the world economy.

V. REASONABLE GAS PRICES -- FERC ACTION NEEDED

Any energy policy must not only foster a reliable gas supply through reform of pipeline construction procedures and transportation access, but must also encourage the development of reasonable rates for the transportation of natural gas. PGC strongly supports the continued implementation by FERC of pro-competitive regulation to create market sensitive and fairly-priced cost-based rates for the services provided. Congress needs to exercise its oversight authority to encourage FERC to continue this process.

Deregulation of natural gas wellhead prices and the implementation of contract carriage or "open access" has been a welcome development. Open access subjects pipeline companies to greater competition, and also benefits consumers and the economy by encouraging more efficient operations by pipelines and has led to a substantial reduction in prices to natural gas consumers of all classes.

The "first phase" of open access has been achieved. Much more, however, remains to be accomplished at FERC. Current pipeline rate structures, which were designed to function in a far different environment, are a significant impediment to complete open access. To address rate restructuring, FERC has

promulgated a Rate Design Policy Statement which reiterates certain principles originally adopted in Order No. 436 and requires that they be addressed in individual pipeline rate proceedings. In order to facilitate competition and implement nondiscriminatory open access transportation, FERC should promptly and aggressively implement its existing Rate Design Policy Statement principles. Otherwise, pipeline merchants will retain unfair competitive advantages over other gas sellers and the full potential of open access -- and the related consumer benefits -- will not be realized.

Specifically, pipeline rates and services must be unbundled so that customers pay only for those services that they want and use. For example, forcing transportation customers to bear the pipelines' costs of storing the pipelines' own gas or of shipping the pipelines' sales gas on upstream pipelines results in cross-subsidies; bundling improperly overprices transportation service to the disadvantage of competing sellers and consumers. Pipeline cost classification, cost allocation and rate design methods must be reformed by FERC so that rates reflect the true economic cost of reserving capacity, thereby helping to assure that those who need capacity most, are able to get it, and stimulating the construction of new pipeline capacity where it is needed. Pipeline rates should also unload fixed costs from commodity rates, thereby better reflecting the value of off-peak usage and maximizing pipeline throughput.

VI. EXPEDITED REVIEW OF FERC ORDERS

Finally, PGC supports the provisions in Title X of S. 341 which would require FERC to take final action on an application for rehearing of a FERC order within 60 days. It is sound regulatory policy to provide procedures to expedite final decision-making. Under current regulations, for example, FERC can delay final action on rehearing indefinitely by issuing unlimited "tolling" orders. As a result, finality can sometimes be delayed for many months while customers attempt to function in today's competitive market. The proposed regulations would require more timely final action which, ultimately, will benefit all parties.

VII. CONCLUSION

As stated at the outset, PGC's statement is from the perspective of the industrial sector -- those who will be among the most affected by implementation of comprehensive energy legislation. With respect to natural gas issues, PGC urges consideration of the important role it currently plays in commercial, industrial and residential applications. Any Federal policy to promote natural gas as a "fuel of choice" should first critically examine the impacts of increased demand on those who depend on natural gas, particularly industrial process and feedstock users. The crucial issues are the size of the resource base and at what price and under what constraints will supplies be available. The members of PGC and other industrial users of natural gas depend on a reliable gas supply and reasonable gas prices.

PGC appreciates the opportunity to offer this statement and looks forward to working with the members of the Committee toward developing a reasonable and rational natural gas energy policy.

UNITED STATES SENATE
COMMITTEE ON ENERGY AND NATURAL RESOURCES

WRITTEN TESTIMONY OF THE
NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS
1102 INTERSTATE COMMERCE COMMISSION BUILDING
P.O. BOX 684, WASHINGTON, D.C.

ON

TITLE I OF S. 341
THE NATIONAL ENERGY SECURITY ACT OF 1991



MARCH 7, 1991

Mr. Chairman and Members of the Committee:

The National Association of Regulatory Utility Commissioners (NARUC, appreciates this opportunity to submit a written statement concerning Title X of S. 341, The National Energy Security Act of 1991. The Association respectfully requests that this statement be entered into the hearing record.

Founded in 1889, the NARUC is a quasi-governmental, nonprofit organization whose members include the regulatory bodies of the fifty States, the District of Columbia, Puerto Rico and the Virgin Islands. Designed to serve the public interest by seeking to improve the quality and effectiveness of government regulation of carriers and utilities, the NARUC's members play a crucial role in shaping the profile and substance of public regulation in America today.

Among the NARUC's membership are the State utility commissions who are responsible for regulating local distribution companies (LDCs), who rely on a natural gas transportation system that can provide them with the supplies they need to meet their customers' demands. In this regard, the NARUC has a great interest in seeing that there is enough capacity in the natural gas transportation system to enhance the reliability of gas supplies to LDCs.

Although Title X of S. 341 appears to address the need for increasing gas pipeline capacity, the NARUC at this time has not developed specific positions with respect to those sections that would streamline the current pipeline certification process under Section 7 of Natural Gas Act and Section 311 of the Natural Gas Policy Act. Therefore, the Association would defer to its

individual State commissions to comment on these aspects of the legislation. Many of these commissions will no doubt express their concern that the provisions of this legislation do not interfere with a State commission's ability to review the gas purchasing practices of LDCs, nor that they lead to an uneconomic bypass of an LDCs that would unfairly penalize captive customers. These are principles endorsed by the NARUC as well.

With respect to Section 10003, the Association has no specific position on this proposal, but would raise the question of what kind of environmental review could take place if there was an absence of a certification process as proposed in Sections 10001 and 10002.

On Sections 10004 through 10007 of Title X, the NARUC would defer to its State commissions, as the Association has not taken a policy position with respect to these sections. It should be noted, however, that the NARUC Committee on Gas has established an ad hoc subcommittee that will be reviewing the various legislative proposals forthcoming from the National Energy Strategy's natural gas initiatives. This ad hoc subcommittee will be reporting its findings to the Committee on Gas and thereafter to the NARUC Executive Committee as soon as possible.

Finally, the NARUC would like to voice its strong support for the provisions found in Section 10008 of Title X. This provision, which makes it clear that State commissions have jurisdiction over the sale of gas for vehicular use, would greatly assist efforts to develop vehicles powered by natural gas. The NARUC has

enthusiastically endorsed the development of natural gas vehicles as can be seen from the attached resolution. In fact, the Association stands ready to endorse not only Section 10008 of this bill, but the freestanding bill, S. 402, which was introduced by Chairman Johnston of this Committee. Without hesitation, the NARUC supports the passage of this bill and similar measures that have been introduced in the House.

In closing, the NARUC would like to affirm its support for comprehensive energy legislation that promotes the efficient and environmentally sound use of natural gas. The use of this fuel as an alternative to oil would not only enhance our energy security but would help us improve the quality of our environment.

ATTACHMENT #1

**Resolution to Further Encourage the Development and
Widespread Use of Natural Gas Vehicles**

WHEREAS, The National Association of Regulatory Utility Commissioners (NARUC) adopted in 1988 a resolution stating that "the widespread development, promotion and use of compressed natural gas in the transportation sector will have important environmental and national security benefits and will assist in improved utilization of natural gas facilities..."; and

WHEREAS, This same resolution urged all NARUC members to take regulatory actions to eliminate ambiguities in utility type regulation concerning the sale and use of natural gas for vehicles and encourage Federal and State agencies and NARUC members to take necessary steps to promote the development and use natural gas in the transportation sector to allow gas companies to make investments in necessary facilities; and

WHEREAS, The air quality in major urban areas has not improved, and serious non-attainment problems exists in scores of metropolitan areas, and air pollution from vehicles is predicted to increase; and

WHEREAS, The use of compressed natural gas a transportation fuel can significantly reduce emissions of ozone precursors and carbon monoxide; and

WHEREAS, The Congress is now considering amendments to the Clean Air Act which will include provisions for extensive utilization of alternative transportation fuels in public and private fleet vehicles, including the use of natural gas; and

WHEREAS, Ultimate savings will accrue from the use of natural gas fueled vehicles through reduced operating costs; now, therefore, be it

RESOLVED, That the Executive Committee of the National Association of Regulatory Utility Commissioners (NARUC), assembled at its 1990 Summer Committee Meeting in Los Angeles, California, supports continued research, development and demonstration by the natural gas industry of the utilization of natural gas in vehicles, and finds that the results of a well planned program, coordinated with and not duplicative of work performed by others, can provide substantial benefits to the public and gas consumers in the form of air quality improvements; and be it further

RESOLVED, That the Executive Committee of the NARUC urges NARUC members to adopt a natural gas vehicle commercialization development program in their States. Such a program should:

1. Provide commission support for State legislative initiatives allowing financial incentives to governmental, public and private fleet vehicles owners for converting fleets from diesel and gasoline to natural gas, and for utility and non-utility investments in

natural gas vehicle fueling stations; and

2. Recognize that sales of natural gas for transportation purposes are in an early state of market development requiring that during such introductory period of 5-10 years, special pricing and tax incentives be provided, especially in view of the reluctance of many vehicles owners to convert from liquid transportation fuels; and be it further

RESOLVED, *That, in response to the provision of utilization of alternative transportation fuels included in the new amendments to the Clean Air Act, the Executive Committee of the NARUC urges each commission to propose for adoption such rules, regulations and policies as well implement a natural gas vehicle commercialization development program for their States; and be it further*

RESOLVED, *That as part of a Nationwide educational effort, the Executive Committee of the NARUC urges each commission to sponsor a joint conference attended by State legislators, by all interested State agency personnel (from agencies concerned with mass transportation, public safety, environmental quality, etc.), by local governments, other interested governmental bodies, and representatives of fleet owner operators, to encourage the widespread development, promotion and use of compressed natural gas in the transportation sector.*

*Sponsored by the Committee on Gas
Adopted July 25, 1990*

JOHN M. ARNOLD, ON BEHALF
OF THE Petroleum Marketers
Association of America

Good morning Mr. Chairman and members of the committee. My name is John Arnold, and I am President of Petroleum Products Corporation located in Harrisburg, Pennsylvania. The Arnold family has been supplying heating fuels for over 70 years. We also sell motor fuels.

I am here today representing the Petroleum Marketers Association of America (PMAA). PMAA is a federation of 43 state and regional trade associations which represent some 10,000 small independent marketers nationwide. These marketers sell almost one-half of the gasoline, three quarters of the heating oil and over 60 percent of the diesel fuel consumed in the U.S. annually. Eighty-nine percent of the companies PMAA represents are classified as small businesses under the U.S. Small Business Administration (SBA) size standards.

I want to begin my remarks today by thanking Chairman Johnston and the Committee for holding this hearing, and I appreciate this opportunity to offer the perspectives of petroleum marketers on Title VII, the Strategic Petroleum Reserve (SPR) provisions of S. 341, the National Energy Security Act of 1991.

A BALANCED NATIONAL ENERGY POLICY IS ESSENTIAL

PMAA applauds the Chairman's efforts to devise a comprehensive long-term energy plan. Overall, PMAA believes S.341 does an admirable job in putting together the elements of an energy policy which, if enacted, will serve this nation well. We strongly believe that to address this nation's energy problems, we must take a two-prong approach. First, we must encourage and seek new sources of all energy supplies both in this country and abroad. Second, we must reduce the demand for all energy sources through a series of conservation and efficiency measures.

PMAA particularly supports the provisions of S. 341 which seek to improve energy efficiency in buildings, energy intensive industries, the government, and the transportation sector. We also strongly support the provisions of S.341 which would allow for exploration of domestic oil including leasing of the Arctic National Wildlife Refuge (ANWR) in Alaska. Such provisions seek to address the long-term consequences of increased consumption of scarce energy resources.

THE SPR IS IMPORTANT TO ALL AMERICANS

PMAA is a long-time supporter of the SPR as a critical policy tool to mitigate the negative impacts of temporary supply disruptions. The Persian Gulf crisis served to underscore the importance of the SPR both in terms of providing physical supply as well as psychological comfort. Although SPR oil was ultimately not a huge factor in the overall supply picture, the fact that the government demonstrated its willingness and ability to supply SPR

oil to the market will have an immeasurable impact on the course of future crises or potential crises.

Thus, PMAA continues to support the SPR and the notion of increasing the reserve's fill rate from its current levels. However, funding a buildup of the SPR through the import set-aside program in Title VII of S. 341 is fundamentally unfair and will ultimately work against the goal of energy security. By requiring importers to provide the government with a percentage of their imported volumes for strategic storage, this program will increase the cost of importing petroleum; this is nothing more than imposition of an oil import tax to fund the SPR.

Since all Americans benefit from a strong SPR, all Americans should bear the cost of financing it. Because PMAA understands the fiscal constraints associated with raising the SPR to a billion barrels and increasing the fill rate of the SPR from current levels, we strongly support alternative means of financing that do not unfairly discriminate among individual citizens of the United States.

One of the measures we support in this regard is a viable SPR oil leasing program. It is our understanding that in September of 1990 the Department of Energy (DOE) was given statutory authority to enter into contracts to store oil owned by others in the reserve. Such a program would help to fill the SPR at a minimal cost to the Federal Government. As soon as practicable, DOE should move forward with negotiations with a number of prospective suppliers to lease oil for the SPR. Now that the Persian Gulf situation has been resolved, the oil Middle East oil producing allies of the United States may be more willing than ever to enter into these types of agreements.

OIL IMPORT TAXES ARE BAD ENERGY POLICY AND BAD ECONOMIC POLICY

The question of future security of supply is one of increasing importance. PMAA strongly supports the President's National Energy Strategy in its realistic approach to energy security issues. The Strategy reflects an understanding that the United States is one player in a complex and interdependent world crude oil and refined products market, and that oil will remain a critical fuel for the U.S. and its allies for the foreseeable future. Because this means that most industrialized countries will continue to import oil, our focus must be on how to increase domestic sources, diversify any foreign supply, and use oil as well as all energy resources more efficiently. Thus, it is not in our national interest to adopt policies which will impose high economic costs in the attempt to reduce imports.

Specifically, the NES states:

Oil imports could be reduced substantially, depending on the level, type, and phase-in of subsidy, taxation, or mandate. But the cost would be very high--in higher prices to American Consumers, lost jobs, and less competitive U.S. industries. Moreover, ...these tax, subsidy, and mandate measures would not necessarily shield the U.S. economy from the effects of future world oil market disruptions, not even if the United States were to eliminate virtually all oil imports. The economic impacts depend more on price, as set by the world market, than on the level of our imports.¹

Because PMAA views the SPR import set-aside program as a cleverly disguised oil import tax, the same sound arguments that have stopped this country from enacting such a tax previously are still applicable.

Study after study has shown the negative consequences of oil import taxes in terms of economics, equity and efficiency. Import taxes cause economic dislocation and have uneven distributional impacts among income groups, geographic regions and industrial sectors. To tie the SPR to such destructive legislation would be unfortunate indeed.

Oil import taxes increase the cost of petroleum, thus reducing consumer income and dampening economic activity. According to the Department of Energy, each \$1 per barrel tax imposed will cost consumers some \$4 billion per year in higher energy costs.² This obviously reduces the American standard of living as consumers will have that much less to spend on other goods and services.

Increased energy costs engendered by an import tax will also reduce the competitiveness of U.S. industries operating in world markets. In addition, U.S. resources will be diverted to the production of higher-cost domestic oil even though cheaper oil could be purchased on world markets, resulting in further economic inefficiency.

The end result will be to depress U.S. economic activity and to reduce the future potential of the economy. DOE estimates that a \$5 import tax will reduce GNP by \$15 to \$25 billion. Estimates developed by Data Resources, Inc. (DRI) suggest that after the

¹U.S. Department of Energy, National Energy Strategy, February, 1991 at p. 5.

²U.S. Department of Energy, Energy Security A Report to the President of the United States, March, 1987.

first year of enacting a \$5 tax, GNP would be reduced by an average of more than 1% annually for four years.³

Of course, reduced economic activity comes at the expense of jobs. DRI estimates that after four years of such a tax, employment will be down by 1 million persons. The depressing effects of an import fee will obviously have even more negative consequences at a time when the economy is already in recession.

The increase in energy costs brought by an import tax will also fuel inflation and have a permanent impact on U.S. price levels. According to DOE, a \$5 fee will raise the Consumer Price Index by 1 to 2 percent. Even after the immediate inflationary effects are absorbed by the economy, however, the U.S. will be operating at a new, higher price level.

Import taxes also have negative international implications. They would be detrimental to our oil exporting allies, several of which have high levels of debt to already-troubled U.S. banks. In addition, import taxes would probably violate a number of international agreements, most notably GATT, and could encourage retaliation, which would have additional negative economic consequences.

IMPORT FEES HAVE UNFAIR DISTRIBUTIONAL IMPACTS

In addition to being inefficient, import taxes are also inequitable, having a disproportionate impact on certain geographic regions, consuming groups, and industries. For example, the Northeastern states, which are heavily dependent on heating oil, will bear increased heating costs. Rural areas which have a heavier per capita consumption of petroleum as a transportation fuel would also be hurt. Energy intensive industries, such as petrochemicals and paper, or those heavily dependent on truck transport will experience relatively more negative impacts than other industrial sectors.

Increased import costs will also cause distortions within the petroleum industry which could threaten the well-being of this nation's independent marketers. Many petroleum marketers buy from the refiners who are largely dependent on foreign crude oil to make gasoline, distillate fuels and other refined products. These refiners will be at a direct competitive disadvantage compared with the companies that refine their own domestic crude oil.

Theoretically, those companies utilizing domestic crude will increase their prices by the same amount as the tax imposed on importers. However, as I think recent history has clearly shown,

³Data Resources, Inc. Review of the U.S. Economy, March 1987.

the petroleum marketplace does not always operate consistently with conventional economic theory.

In the retail gasoline business, for example, there is intense competition for marketshare. So intense, that at times the pure change to the retail motorist is less than the wholesale price to independent marketers at the terminal. In this environment, refiners that have their own domestic sources of crude oil supply will always be at a significant competitive advantage to those refiners, and the customers of those refiners, who must import their supply. I might add that this advantage is not earned by any inherent efficiency by the domestic company but rather a discriminatory government policy.

Energy security is a public good enjoyed by all. If the underlying purpose of this legislation is to promote energy security, then any costs associated with it should be as evenly distributed as possible.

AN OIL IMPORT TAX IS NOT THE BEST WAY TO HELP THE DOMESTIC INDUSTRY

PMAA believes there are better, less destructive ways, than an oil import tax, to induce exploration and production of domestic crude oil. The federal and state governments can encourage domestic oil activity by reducing severance taxes on crude oil, by extending the oil depletion allowance, and through increasing the intangible drilling credits. We could adopt a system similar to the one the United Kingdom uses in the North Sea. Under this system a well's production is not taxed until all the exploration and development costs have been recovered by the company. Currently the domestic oil industry carries the heaviest tax burdens of any industry and recent changes in the tax and law enactment of the Superfund tax increases that burden substantially.

Finally, as we previously stated, PMAA supports the opening of more federal lands for offshore drilling as well as the ANWR. PMAA also supports efforts to encourage production of all energy sources, not just oil, in this country and in countries outside the Persian Gulf.

These are just a few ways our domestic industry can be helped without hurting our country's fragile economy.

CONCLUSION

In conclusion, PMAA asks the Committee to consider all the consequences of the Title VII proposal, and in doing so conclude that such a proposal should not be a part of what is otherwise a very good model for a comprehensive energy policy.

PMAA appreciates this opportunity to present its views on this important legislation, and would be glad to respond to any questions you may have.